PLAINTIFFS' PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

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21   CHASOM BROWN, WILLIAM BYATT,
     JEREMY DAVIS, CHRISTOPHER
22   CASTILLO, and MONIQUE TRUJILLO
     individually and on behalf of all similarly
23   situated,

24

            Plaintiffs,
25

26   vs.

27   GOOGLE LLC,

28   Defendant.

Case No.: 4:20-cv-03664-YGR-SVK

**PLAINTIFFS' PROPOSED FINDINGS
OF FACT AND CONCLUSIONS OF
LAW**

The Honorable Magistrate Judge van Keulen
Courtroom 6 - 4th Floor
Date: April 21, 2022
Time: 10:00 a.m.

[PLAINTIFFS' PROPOSED] FINDINGS OF FACT AND CONCLUSIONS OF LAW

Before the Court is Plaintiffs' motion seeking sanctions for Google's discovery misconduct. ("Plaintiffs' Motion" or "Mot.") (Dkt. 430). Plaintiffs moved for leave to file to file a supplement ("Supp."), which the Court granted (Dkt. 512). Google filed an Opposition ("Opp.") (Dkt. 528), and Plaintiffs filed a Reply ("Reply") (Dkt. 536). The parties also filed competing proposed Findings of Fact and Conclusions of Law (Dkts. XX, XX), and the Court held an in-person evidentiary hearing on April 21, 2022.

Having considered all of the papers and evidence before the Court, the Court GRANTS Plaintiffs' Motion. As detailed in this Findings of Fact and Conclusions of Law, Google violated this Court's discovery orders and engaged in other discovery misconduct warranting the sanctions imposed below.

FINDINGS OF FACT

I.   Background

      A.   Plaintiffs' Allegations

1.   On September 21, 2020, Plaintiffs filed their First Amended Complaint ("FAC") (Dkt. 68). Plaintiffs' FAC challenged Google's "surreptitious interception and collection of personal and sensitive user data while users are in a 'private browsing mode,'" including Google's Chrome "Incognito" mode. FAC ¶¶ 151-57, 63-66 (Dkt. 68).

2.   In their FAC, Plaintiffs alleged that Google sets a unique identifier, called an "X-Client-Data Header," for each device on which Chrome is installed. *Id.* ¶ 95. Plaintiffs further alleged that Google transmits this unique digital string to its servers in all Chrome states *except* Chrome's Incognito mode, allowing Google to use the absence of the X-Client-Data Header to determine whether a user is in Incognito mode. *Id.* ¶ 96.

3.   In addition to challenging Google's interception and collection of data from users visiting non-Google websites in "private browsing mode," Plaintiffs also alleged that Google used such data "to improve Google's own algorithms and technology, such as Google Search." *Id.* ¶ 115. For instance, Plaintiffs alleged:

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Google market power in Search is entirely dependent on its ability to track what consumers are doing. The trackers that Google has across the internet not only tell Google where consumers go subsequent to searching on Google Search, the trackers allow Google to track what websites are popular and how often they are visited. By compiling not just consumer profiles, but surveying human behavior across the vast majority of web browser activity, Google is able to create a better and more effective search product as compared to its competitors, by its ability to claim that Google knows how to best rank websites and online properties, because Google can track consumers' activity better than anyone ese. Google Search would not be nearly as effective as a search tool without Google Analytics as a complement.

Id. ¶ 121.

4.   Plaintiffs' FAC alleged claims for (1) federal wiretap violations, 18 U.S.C. §§ 2510, *et seq.*; (2) invasion of privacy act violations, Cal. Pen. Code §§ 631 & 632; (3) violations of the Comprehensive Computer Data Access and Fraud Act ("CDAFA"), Cal. Pen. Code §§ 502, *et seq.*; (4) invasion of privacy; and (5) intrusion upon seclusion. *See id.* ¶¶ 202-66.

5.   Plaintiffs asserted these claims on their own behalf, and on behalf of the following classes:

Class 1 – All Android device owners who accessed a website containing Google Analytics or Ad Manager using such a device and who were (a) in "private browsing mode' on that device's browser and (b) were not logged into their Google account on that device's browser, but whose communications, including identifying information and online browsing history, Google nevertheless intercepted, received, or collected from June 1, 2016 through the present (the "Class Period");

Class 2 – All individuals with a Google account who accessed a website containing Google Analytics or Ad Manager using any non-Android device and who were (a) in "private browsing mode" in that device's browser, and (b) were not logged into their Google account on that device's browser, but whose communications, including identifying information and online browsing history, Google nevertheless intercepted, received, or collected from June 1, 2016 through the present (the "Class Period").

Id. ¶ 192.

6.   Plaintiffs alleged that "individual members [of the classes] will be identifiable from Google's records, including from Google's massive data storage, customer accounts, and enterprise services." *Id.* ¶ 194.

7.   On March 12, 2021, the Court issued an order denying Google's motion to dismiss in its entirety. Order (Dkt. 113). In doing so, the Court noted Plaintiffs' allegation regarding identification of Incognito users:

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[P]laintiffs allege that, for users using Chrome without Incognito Mode, Chrome constantly transmits "a unique digital string of characters called Google's 'X-Client-Data Header,' such that Google uniquely identifies a device thereafter.' However, Plaintiffs allege that the X-Client Data Header is not present when a Chrome user has enabled Incognito Mode. Accordingly, Plaintiffs allege that Google is able to tell when a Chrome user has enabled Incognito Mode.

Id. at 4.

8.   Plaintiffs subsequently amended their Complaint in April 2021 to add causes of action for (1) breach of contract and (2) violations of California's Unfair Competition Law ("UCL"). Second Amended Complaint ("SAC") (Dkt. 136-1). The Court subsequently denied Google's motion to dismiss Plaintiffs' SAC in its entirety. Dkt. 363.

9.   On February 3, 2022, Plaintiffs moved for leave to file their Third Amended Complaint ("TAC"), which amended their class definitions to include Google's collection of private browsing information by way of all "Google tracking or advertising code." The TAC defines the classes as follows:

Class 1 – All Chrome browser users with a Google account who accessed a non-Google website containing Google tracking or advertising code using such a browser and who were (a) in "Incognito mode" on that browser and (b) were not logged into their Google account on that browser, but whose communications, including identifying information and online browsing history, Google nevertheless intercepted, received, or collected from June 1, 2016 through the present (the "Class Period").

Class 2 – All non-Chrome browser users with a Google account who accessed a non-Google website containing Google tracking or advertising code using any such browser and who were (a) in "private browsing mode" on that browser, and (b) were not logged into their Google account on that browser, but whose communications, including identifying information and online browsing history, Google nevertheless intercepted, received, or collected from June 1, 2016 through the present (the "Class Period").

TAC (Dkts. 395, 395-2). The Court granted Plaintiffs' motion on March 18, 2022 (Dkt. 504).

B.   Since 2017, Google Has Used Tools It Built to Identify Chrome Incognito Traffic

10.   In 2017, Google began logging a field called "is_chrome_incognito" in at least ▮ Google logs with limited retention periods: (1) ▮▮▮▮▮▮▮▮ (▮▮▮ retention period) and (2) ▮▮▮▮▮▮▮▮▮▮ (▮▮▮ retention period). Pls'. Supp, Ex. 2, Sadowski Reference Sheet (Dkt. 511-3).

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1   11.   In 2017, Google also began logging a field called "is_chrome_non_incognito" in at

2   least ██   Google logs with limited retention periods: (1) ████████████████████ (██

3   ██ retention period); (2) ████████████████████ (████ retention period);

4   and (3) ████████████████ (████ retention period). *Id.*

5   12.   Google has not provided information regarding exactly when these two Incognito-

6   detection bits were implemented by Google, except that it occurred sometime in 2017.

7   13.   These two fields exist in GWSLogEntryProto, which means that Google can enable

8   them in any GWS log, even where Google is not already logging them in that log. Thompson Decl.

9   ¶¶ 16-18 (Dkt. 536-8). Writing to an existing field within a Protocol Buffer data structure (e.g.,

10   GWSLogEntryProto) is a one-line code addition. *Id.* Google's own public documentation on the

11   Protocol Buffers library and specification explains how easy it is to write into an existing field.

12   *See   e.g.*,   https://developers.google.com/protocol-buffers/docs/cpptutorial#writing-a-message,

13   referenced in *id* at Footnote 1.

14   14.   According to Google's 30(b)(6) witness, who was deposed after the close of fact

15   discovery, Google created these two Google Incognito-detection bits to "look[] specifically at

16   whether there is an X-Client . . . Data header in the request that is sent." Pls'. Supp. Ex. 3,

17   Sadowski Tr. 76:7-9 (Dkt. 511-4).

18   15.   According to this same 30(b)(6) witness, Google sets "is_chrome_non_incognito"

19   to "true" when the X-Client Data header is present. *Id.* 76:12-16.

20   16.   Similarly, Google sets the "is_chrome_incognito" field to "true" when (1) the X-

21   Client Data header is absent and (2) the "user agent" is consistent with a Chrome browser. *Id.*

22   77:20-78:21.

23   17.   On April 1, 2022, also after the close of fact discovery, Google provided Plaintiffs

24   with the following "proto comment" for Google's "is_chrome_incognito" bit: ████████████

25   ████████████████████████████████████ Reply Ex. 1, Apr. 1, 2022

26   Letter from Google Counsel to Special Master Brush (Dkt. 536-2).

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18.   According to Google's 30(b)(6) witness, who was deposed after the close of fact discovery, a Google employee named Quentin Fiard is one of the people most knowledgeable about the one document Google produced concerning the "is_chrome_non_incognito" field. Pls'. Supp, Ex. 3, Sadowski Tr. 65:3-7 (Dkt. 511-4).

19.   Google's 30(b)(6) witness testified that she did not know for certain whether the logic used by the "is_chrome_non_incognito" field was cross-platform, explaining that she would need to investigate further and speak with Mr. Fiard about that question. *Id.* Sadowski Tr. 76:5-77:8.

20.   Google's 30(b)(6) witness also testified that she did not herself search Google's internal code search tool, and that it was Mr. Fiard who provided the list of log sources she included in her notes for the deposition. *Id.* Sadowski Tr. 89:14-90:8.

21.   Google's 30(b)(6) witness did not identify any documents or persons most knowledgeable regarding the "is_chrome_incognito" field, and instead merely referred to Mr. Fiard as her source of knowledge.

22.   The following chart contains the Google logs identified by Google that contain the "is_chrome_non_incognito" field:

Google logs containing "is_chrome_non_incognito" field	Date Google began logging field
███████████████████████	[Google has not disclosed]
███████████████████████	[Google has not disclosed]
███████████████████████	[Google has not disclosed]

Pls'. Supp Ex. 2, Sadowski Reference Sheet (Dkt. 511-3).

23.   The following chart contains the Google logs identified by Google that contain the "is_chrome_incognito" field:

Google logs containing "is_chrome_incognito" field	Date Google began logging field

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| ██████████████████ | [Google has not disclosed] |
| ███████████████████████ | [Google has not disclosed] |

Pls'. Supp, Ex. 2, Sadowski Reference Sheet (Dkt. 511-3).

C.   Starting in 2019 and During the Course of this Litigation, Google Built Another Tool to Identify Incognito Traffic

24.   In 2019, Google employee Chris Liao and others (as part of project █████████████) began evaluating how much it would cost Google to block third-party cookies by default in Chrome's Incognito mode. Mot. Ex. 14, GOOG-CABR-04324934 (Dkt. 430-15).

25.   Mr. Liao's efforts culminated in a document he prepared titled "Ads Impact and Response from ███████████ and 'SameSite & Secure' Launches," where Mr. Liao quantified the financial impact this change would have on Google's revenue streams. *Id.*

26.   According to this document, Google estimated it would lose roughly ████████████ in annual revenues from this change. *Id.*

27.   In May 2020, as Google was implementing ███████████ Google employees Chris Liao, Bert Leung, and Mandy Liu began working on a project that culminated in Google using another Incognito-detection bit, ultimately re-named "maybe_chrome_incognito." Reply Ex. 6, Draft Stipulation Regarding Google's Maybe_Chrome_Incognito Field (Dkt. 536-7).

28.   Internal Google documents show that Google developed and implemented this Incognito-detection field from 2020 to the present to quantify the ongoing financial impact of blocking third-party cookies by default in Incognito. Mot. Ex. 3, GOOG-BRWN-00845423 at -23 (Dkt. 430-4) (explaining that the plan to develop maybe_chrome_incognito had been "approved" and noting that one purpose was "[t]o better keep up with the status quo of the latest 3p-cookie-blocking browsers as well as quantify the impact of the incoming ones"); Forthcoming Hearing Ex. (GOOG-BRWN-00845526) (Mandy Liu responds to question "Why do you want this?"—addressing plan to "[l]og Maybe Chrome Incognito Bit"—by explaining that "With the efforts made in ███████████ a long term solution is in need to provide a standard way to detect and

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monitor Incognito as well as all the other 3p-cookie-blocking browsers, hence we have this bit and this design doc").

29.   On June 9, 2020, approximately one week after Plaintiffs filed this lawsuit, Mr. Leung submitted a proposal for a project to "detect [third-party] cookie blocking browsers . . . in ad serving, and log this information for monitoring and analysis." Mot. Ex. 1, GOOG-BRWN-00845639 at -40 (Dkt. 430-2). This proposal identified Chrome's Incognito mode as one of the third-party cookie blocking browsers the proposed project aimed to detect. *Id.* With his proposal, Mr. Leung noted the "potential privacy risk of logging inferred Chrome Incognito detection" and sought "feedback from privacy gurus." *Id.*

30.   Mr. Leung worked with Google engineer Mandy Liu to refine Google's process for detecting and logging Incognito traffic with the "maybe_chrome_incognito" field. *See, e.g.*, Mot. Ex. 2, GOOG-BRWN-00845596 (Dkt. 430-3); Mot. Exs. 22-24, GOOG-BRWN-00845281, GOOG-BRWN-00845275, GOOG-BRWN-00845274 (Dkts. 430-23 to 430-25).

31.   The "Chrome Incognito proxy signal" Mr. Leung was working on was also based on the absence of the "Chrome/Google specific X-Client-Data header." Mot. Ex. 11, GOOG-BRWN-00845277 at -77 (Dkt. 430-12).

32.   Mr. Liao—who supervised both Mr. Leung and Ms. Liu—was involved in these efforts. Pls'. Supp. Ex. 4, Liu Tr. 16:2-13, 17:21-18:6, 21:17-25 (Dkt. 511-5); Liao Decl. ¶ 10 (Dkt. 528-3).

D.   During   the   Summer   of   2021,   Google   Began   Logging "Maybe_Chrome_Incognito"

33.   Up   until   March   4,   2021,   Google   was   planning   to   log   the "maybe_chrome_incognito" bit in a set of logs called ▮▮▮▮ logs. Mot. Ex. 25, GOOG-CABR-03668216 at -19 (Dkt. 430-26). That plan, however, was not approved as to the ▮▮▮ logging. *Id.*

34.   On March 5, 2021, Google's design document was updated to reflect a new plan— to log the field in a different set of logs called ▮▮▮▮ logs." Mot. Ex. 21, GOOG-CABR-05757329 at -31 (Dkt. 430-22).

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35.   On or around March 11, 2021, Google employees drafted a logging proto to implement the field called "maybe_chrome_incognito_do_not_use_ without_consulting_ads_identity_team." Reply Ex. 6, Draft Stipulation Regarding Google's Maybe_Chrome_Incognito Field (Dkt. 536-7). The field was a Boolean field, meaning it would have one of only two possible values, represented by either a 1 (for "yes") or a 0 (for "no") in any log field. Thompson Decl. ¶ 20 (Dkt. 536-8).

36.   On June 17, 2021, Google began logging data with the above "maybe_chrome_incognito" field in ▮▮ ▮▮ logs. Reply Ex. 6, Draft Stipulation Regarding Google's Maybe_Chrome_Incognito Field (Dkt. 536-7).

37.   On July 4, 2021, Google began logging data with the above "maybe_chrome_incognito" field in ▮▮ additional ▮▮ logs, resulting in ▮ logs sources that contain the maybe_chrome_incognito bit. Reply Ex. 6, Draft Stipulation Regarding Google's Maybe_Chrome_Incognito Field (Dkt. 536-7).

38.   Google implemented the "maybe_chrome_incognito" Boolean field into the data sources and logs listed below. Reply Ex. 6, Draft Stipulation Regarding Google's Maybe_Chrome_Incognito Field (Dkt. 536-7).

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E.   During this Litigation Google Could Use The 2017 Incognito-Detection Bits in Other Google Logs

39.   Google uses a "Protocol Buffer" data structure to populate fields in various Google logs. Writing to an existing field within a Protocol Buffer data structure is a one-line code addition. Thompson Decl. ¶¶ 18 (Dkt. 536-8).

40.   The "is_chrome_incognito" and "is_non_chrome_incognito" bits are written in this Protocol Buffer-format, and Google had already built these bits in 2017 and 2018. Pls'. Supp Ex. 2, Sadowski Reference Sheet (Dkt. 511-3).

41.   Because these bits exist in GWSLogEntryProto, the two bits could have been made "live" at the beginning of the case, or "added" to any GWS log. Put differently, any process within Google that writes to a log using the GWSLogEntryProto data structure need simply write to that specific field. Thompson Decl. ¶¶ 16-18 (Dkt. 536-8).

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42.   Google's own public documentation on the Protocol Buffers library and specification explains how easy it is to write to an existing field. *See* https://developers.google.com/protocol-buffers/docs/cpptutorial#writing-a-message, referenced in Thompson Decl. fn. 1 (Dkt. 536-8). The example from Google's documentation involves writing an ID to "person" message, and in C++ it is as simple as "person->set_id(id)"; where "id" is the desired value. Thompson Decl. ¶ 19 (Dkt. 536-8).

II.   Google's Misconduct

A.   Google Failed to Disclose Relevant Employees Chris Liao, Bert Leung, Mandy Liu, and Quentin Fiard

43.   On September 30, 2020, Plaintiffs served their first set of Requests for Production on Google (Nos. 1-19). Mot. Ex. 13 (Dkt. 430-14).

44.   Plaintiffs' RFP No. 11 sought: "Documents sufficient to identify Google's current and former officers, directors, managers, employees and consultants with knowledge of the alleged Google conduct." *Id*. at 14.

45.   Plaintiffs' RFP No. 12 sought: "Documents sufficient to show the roles and responsibilities of and supervisory relationship between Google's current and former officers, directors, managers, employees and consultants with knowledge of the alleged conduct." *Id.* at 15.

46.   On October 30, 2020, in response to RFP No. 11, Google agreed to produce "responsive documents sufficient to identify current Google personnel with responsibility for the relevant conduct relating to Google Chrome, Google Analytics, and Google Ad Manager…." *Id.*

47.   On October 30, 2020, in response to RFP No. 12, Google agreed to produce "responsive documents sufficient to show the roles of current Google personnel with responsibility for the relevant conduct relating to Google Chrome, Google Analytics, and Google Ad Manager, to the extent that such documents exist, are within Google's possession, custody, or control, and can be located following a reasonable search." *Id.* at 16.

48.   On December 2, 2020, Google placed Chris Liao on a litigation hold for this matter. Liao Decl. ¶ 2 (Dkt. 528-3).

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49.   On December 15, 2020, Google placed Bert Leung on a litigation hold for this matter. Leung Decl. ¶ 2 (Dkt. 528-4).

50.   Google has not provided information regarding whether it put Mandy Liu or Quentin Fiard on any litigation hold for this matter.

51.   On February 4, 2021, Google produced a list of over 200 employees in response to Plaintiffs' RFP Nos. 11 and 12. Mot. Ex. 4, GOOG-BRWN-00023909 (Dkt. 430-5).

52.   On February 25, 2021, Google's counsel confirmed that this list was produced in response "to RFP Nos. 11 and 12." Forthcoming Ex. (February 25, 2021 Letter from Google's counsel).

53.   The list Google produced did not disclose Chris Liao, Bert Leung, Mandy Liu, or Quentin Fiard—despite the fact that Google had previously placed at least Mr. Leung and Mr. Liao on a litigation hold.

54.   On February 26, 2021, Plaintiffs served their second set of interrogatories on Google, including Interrogatory No. 4: "For the period since June 1, 2008, identify Google's current and former officers, directors, managers, employees, and consultants with responsibility for or knowledge of": (1) "Google's Incognito mode"; (2) "Google's collection of and use of data in connection with users' activity while in a private browsing mode . . . and any Google products or services that collect and use such data"; and (3) "Google's creation and use of profiles or other aggregated data with data collected in connection with users' activity while in a private browsing mode . . . ." Mot. Ex. 5 (Dkt. 430-6).

55.   On March 29, 2021, Google served its response to Plaintiffs' Interrogatory No. 4. Google's response cross-referenced the list it produced on February 4, 2020 and named several additional persons, but it did not identify Chris Liao, Bert Leung, Mandy Liu, or Quentin Fiard. Mot. Ex. 6 (Dkt. 430-7).

56.   On April 27, 2021, to identify relevant custodians in *Brown*, Plaintiffs asked Google to identify the 18 custodians that Google had proposed in the *Calhoun* action. Forthcoming Ex. (May 21, 2021 Letter from Plaintiffs' counsel).

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57.   In response, Google declined to share such information, unless Plaintiffs agreed not to seek information concerning 79 other "persons of interest" identified by the *Calhoun* plaintiffs. Forthcoming Ex. (June 21, 2021 Letter from Google's counsel).

58.   On June 2, 2021, the Court held a joint hearing on discovery disputes in this matter and the *Calhoun* action, during which the Court stated "I don't see why the names can't be shared" when asked about whether Plaintiffs in the *Brown* and *Calhoun* matters could "exchange our current ESI custodian list with each other . . . ." June 2, 2021 Hr'g Tr. 67:5-11.

59.   On June 3, 2021, counsel for the *Calhoun* Plaintiffs informed counsel for the *Brown* Plaintiffs that Google had proposed 18 custodians in the *Calhoun* case, including Chris Liao. Forthcoming Ex. (June 3 email from *Calhoun* Plaintiffs' counsel).

60.   That list of *Calhoun* custodians did not include Bert Leung, Mandy Liu, or Quentin Fiard. Forthcoming Ex. (June 3 email from *Calhoun* Plaintiffs' counsel)

61.   On June 16, 2021, Plaintiffs deposed Google's Rule 30(b)(6) representative Dr. Glenn Berntson, who testified that he had spoken to Chris Liao to prepare for his deposition and that Mr. Liao was "deeply involved in the evolution of ID related initiative within ads . . . ." Forthcoming Ex. (Berntson Tr. 258:12-13, 334:11).

62.   On June 22, 2021, Plaintiffs' counsel conferred with Google and sent a letter stating: "As discussed, please let us know whether Google will include Mr. Liao as a custodian." Forthcoming Ex. (June 22, 2021 Letter from Plaintiffs' counsel). Google agreed. Dkt. 202 at 2.

63.   The Court ordered that final disputes concerning custodians be submitted to the Court by no later than August 24, 2021. Dkts. 242-1, 258.

64.   Bert Leung, Mandy Liu, and Quentin Fiard—whom Google had not disclosed to Plaintiffs—were not selected as document custodians.

B.   Google Failed to Disclose the Incognito-Detection Bits and as a Result Avoided an Order to Preserve Relevant Data

65.   At the same time that Plaintiffs sought to identify relevant custodians, Plaintiffs also sought to ensure preservation and production of relevant data.

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66.   Google indicated that it intended to put at issue Plaintiffs' ability to identify Incognito traffic from its logs early in this litigation, stating in a Case Management Statement filed with the Court on September 2, 2020: "[I]t is unclear how Plaintiffs could ascertain the members of the proposed class…." Dkt. 59 at 8.

67.   On September 30, 2020, Plaintiffs served RFP No. 10 seeking: "Documents sufficient to identify all alleged class members, including all electronic or physical address information associated with alleged class members." Mot. Ex. 13 at 13 (Dkt. 430-14). Google refused to produce any documents, including on the grounds that the "identity of 'alleged class members' . . . is not ascertainable." *Id.*

68.   On September 30, 2020, Plaintiffs also served RFP No. 18 seeking: "Documents concerning Plaintiffs, including Plaintiffs' use of Google services, all data collected by Google from and regarding Plaintiffs, and Google's use of all data collected by Google from and regarding Plaintiffs." *Id.* at 20. Google objected to producing documents responsive to RFP No. 18, only agreeing to "collect data associated with Plaintiffs' Google Accounts and Google Account IDs." *Id.* at 21.

69.   Google subsequently sent Plaintiffs letters indicating that (1) it would not alter its default retention periods to preserve data and (2) it would not produce the data Plaintiffs requested.

70.   On January 13, 2021, Google sent Plaintiffs a letter stating:

> **Private Browsing Mode Data.** Plaintiffs asked Google about the retention period for the event-level user data that is collected while users are in private browsing mode. *As we explained on the call, there are no logs or other documents that separately identify data collected through Ad Manager or Analytics from users in private browsing mode.* We have further explained, in briefing and in our responses to Plaintiffs' discovery requests, that Ad Manager and Analytics do not distinguish between users who are in a private browsing mode and users who are not in a private browsing mode. Therefore, Plaintiffs' request that Google preserve any log that may reflect data from users in private browsing mode is essentially asking for the preservation of *any and all* logs reflecting event-level user data received through Ad Manager and Analytics.

Forthcoming Ex. (Jan. 13, 2021 Letter from Google's counsel at 2 (emphasis added).)

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71. These statements were not true: Google had been logging the "is_chrome_incognito" and "is_chrome_non_incognito" fields since 2017, which cataloged logged data both by "browser type" (Chrome) and "private browsing mode" (Incognito).

72. Moreover, on the same day Google sent Plaintiffs this letter (January 13, 2021), Bert Leung emailed his Google colleagues explaining that he had been working on a "Chrome Incognito proxy signal," which "comes from a Chrome/Google specific X-Client-Data header." Mot. Ex. 11, GOOG-BRWN-00845277 (Dkt. 430-12).

73. On January 19, 2021, Plaintiffs' counsel sent a response letter, pressing Google once again on whether Google could distinguish Incognito data based on the absence of the X-Client-Data Header or other mechanisms:

> Google admits that it receives data from consumers' private browsing communications as alleged, and we have repeatedly explained how certain data that Google collects can be used to determine whether the user is browsing Incognito. ***For example, Google can determine whether a user is in Incognito at the time of the browsing session by reference to the X_Client-Data_Header (or lack thereof).*** The First Amended Complaint details this, we discussed this previously, and we also explained this again in our December 23 letter. ***We are concerned that Google receives data that can identify users who are browsing in Incognito mode (including but not limited to the X_Client_Data_Header) but that Google may not be preserving the data needed to identify such users (who would be class members).***
>
> Google now appears to take the position that it lacks data concerning a user's private browsing sessions (i.e., data identifying class members), ignoring our allegations and prior letters regarding the ways in which data can be used to identify class members. Instead, Google asserts that it continues to aggregate private browsing data with non-private browsing data. It is unclear from your January 13 letter whether Google did (and continues to) destroy such private-browsing data or whether Google merely merged it (or continues to merge it) with the non-private browsing data on its servers as it receives the data.
>
> ***If Google takes the latter position, the fact that Google does not maintain logs or other documents that distinguish between users who are 'Incognito' from 'non-Incognito' (or in some other private browsing mode) is immaterial until Plaintiffs can determine whether such data can be disaggregated***. Under either position, however, Google's decision to merge data from both private browsing and non-private browsing into a single set of logs provides no basis for Google to destroy any logs. ***While we are willing to discuss efficient ways to handle production, Plaintiffs in the meantime do not and cannot agree to any Google destruction of potentially relevant documents and data***, especially in light of Google's January 6 and 13 representations.

Forthcoming Ex. (Jan. 19, 2021 Letter from Plaintiffs' counsel at 3 (emphasis added)).

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74.   On February 5, 2021, Google responded, but Google's letter failed to disclose that Google in fact had been "distinguish[ing] between users who are 'Incognito' from 'non-Incognito'" using the "is_chrome_incognito" and "is_chrome_non_incognito" fields since 2017. Nor did Google disclose that, using those Incognito-detection bits, Google could extract relevant data across logs to create a custom log of relevant fields, rather than preserve all logs in their entirety. Instead, Google's February 5, 2021 letter stated:

> Plaintiffs now ask Google to suspend the regular retention policies of all logs that may record any data from users' private browsing in the United States. Plaintiffs claim that 'it appears necessary to preserve all logs' of logged-in and logged-out users that may contain data generated during private browsing sessions 'so that Plaintiffs can evaluate those logs and other data to assess the best way to identify private browsing mode users and the data collected from their private browsing.' Letter at 5. Google disagrees. Plaintiffs' request is grossly disproportionate to the needs of the case.

> *   *   *

> ***The log data is not reasonably limited by*** geographic region, ***by browser, or by browser mode.*** For that reason, Plaintiffs' preservation request sweeps in a plethora of data for millions of individuals who are not putative class members….

> *   *   *

> [T]he sheer size of these logs makes Plaintiffs' demand unworkable. These logs cover ▮▮▮▮▮▮▮▮▮▮▮ and include data reflecting the activity of ▮▮▮▮ of users, many of whom are not putative class members. Google estimates that suspending preservation of these logs—even if possible—would result in an additional ▮▮▮▮▮ ▮▮▮▮▮▮▮▮▮▮▮▮▮▮

Forthcoming Ex. (Feb. 5, 2021 Letter from Google's counsel at 2).

75.   Google's representations about the data it was logging and the costs of preservation were misleading. Google's Incognito-detection bits were clearly relevant to these preservation discussions and should have been disclosed.

76.   On the same day that Google's counsel sent the February 5, 2021 letter to Plaintiffs, Google's counsel was also directly communicating with Bert Leung. Mot. Ex. 7 (email logging communications between Google's counsel and Bert Leung, Dkt. 430-8).

77.   Google also sent multiple letters declining to produce Plaintiffs' and class member data in response to RFP No. 10, none of which disclosed the existence and use of Google's Incognito-detection bits. For example:

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a. On January 21, 2021, without disclosing these Incognito-detection

bits, Google sent Plaintiffs a letter stating that "Plaintiffs' unfounded speculation

about how they might be able to link private browsing data to individual users in

order to identify class members does not justify producing user-level data in

response to RFP No. 10." Forthcoming Ex. (Jan. 21, 2021 Letter from Google's

counsel).

b. On February 18, 2021, without disclosing these Incognito-detection

bits, Google sent Plaintiffs a letter representing that "logged-out private browsing

data is not linked or reasonably linkable to a specific consumer." Forthcoming Ex.

(Feb. 18, 2021 Letter from Google's counsel).

78. On March 23, 2021, Plaintiffs and Google filed a joint letter brief concerning

Google's refusal to suspend its routine deletion period for any logs. Dkt. 119.

79. Without disclosing the existence and use of Google's Incognito-detection bits to

the Court, Google argued that the "Disputed Logs record ███████ of entries a day" and that

"suspending preservation of these logs . . . would require storing ████████████████████████

████████████████████████," which would take "████████████████████████████

██████████████████" *Id.* at 4. In other words, Google represented that preserving relevant data

would require preserving logs in their entirety.

80. In connection with that briefing, Google did not at any time disclose that (1) it had

been using the "is_chrome_incognito" and "is_chrome_non_incognito" fields in Google logs since

2017; (2) Google engineers had received approval to log another field called

"maybe_chrome_incognito" to identify Incognito traffic; and (3) using such fields would allow

Google to construct a custom log and only preserve a smaller percentage of the logged data.

81. On April 23, 2021, the parties submitted a joint letter brief on various discovery

disputes, including Google's refusal to produce data in response to RFP No. 10. Dkt. 140.

82. Without disclosing the existence and Google's use of these Incognito-detection bits

to the Court, Google represented in that brief: "Plaintiffs' request for Google to produce 'browsing

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data where the X-Client-Data header is and is not present' is unworkable" and that "the absence of the header *cannot* be used to ascertain purported class members as it would improperly include *all* users browsing on a non-Chrome browser . . . ." *Id.* at 5 (emphasis in original).

83.   In connection with that briefing, Google did not at any time disclose that since at least 2017, it had been identifying Incognito traffic with the "is_chrome_incognito" bit using two criteria: (1) the absence of the X-Client-Data header and (2) a user agent string consistent with the Chrome browser that excluded users browsing on non-Chrome browsers that would otherwise not send an X-Client Data header. Pls'. Supp. Ex. 3, Sadowski Tr. 77:20-78:2 (Dkt. 511-4).

84.   Nor did Google disclose that these bits were already in Google's GWSLogEntryProto, and could be enabled for any GWS log using the GWSLogEntryProto schema. Thompson Decl. ¶¶ 16-18 (Dkt. 536-8).

85.   On April 29, 2021, the Court held a joint discovery hearing in the *Brown* and *Calhoun* matters. The Court ruled during the *Calhoun* portion of the hearing that, "based on the facts before the Court, Google need not suspend its standard retention periods applicable to data logs that reflect event-level data of Chrome users in the United States" and that "[t]his order is without prejudice to challenge based upon new evidence not currently before the Court." Apr. 29, 2021 *Callhoun* Hr'g Tr. 21. The Court adopted that *Calhoun* order in this case by reference. Dkt. 147-1.

86.   During the *Brown* portion of the hearing, the Court asked Google whether the Court correctly understood Google's arguments against producing data in response to RFP No. 10:

> Okay. So we can start with the as – and I appreciate Google's argument, which I looked at carefully as set forth in the additional page of briefing, as to – you know, just to sum it up, that these don't – that these don't link up, just to not give full credit, but that's – that's how I – that's my take away from the argument.
>
> And that when you're looking at these various components like the X-Client Data field in a header log, just because that's empty doesn't mean that they were in incognito mode because sometimes that information is transferred and sometimes it's not.
>
> I also understand that – the argument that with regards to the special cookies or identifiers for – that Google uses when someone is browsing, but not logged in to their account, that when that browsing session comes to an end, Google says, well, that – then those cookies disappear.

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So my first question is – I appreciate the statements. Has that – is that Google's position? Is there any evidence that supports those conclusions yet in the record, either through deposition or responses?

Apr. 29, 2021 *Brown* Hr'g Tr. 15-16.

87.   In response to the Court's question, Google did not disclose that it *had* been identifying Incognito traffic with an "is_chrome_incognito" bit based on (1) the absence of the X-Client Data Header and (2) a user-agent string indicating a Chrome browser since at least 2017.

Id.

88.   Addressing Plaintiffs' RFP No. 10 seeking "[d]ocuments sufficient to identify all alleged class members," and Plaintiffs' proposal to focus on data where the X-Client Data Header is missing, Google's counsel represented to the Court that it had no way to query its data to locate private browsing sessions:

> [W]e felt like there's quite a lot of speculation on behalf of [Plaintiffs' counsel] and we wanted to explain to you that this is actually not something that we just have or can quickly query, nor do we think their proposed path is one that will lead to that outcome.

Apr. 29 Hr'g Tr. 20:1-6.

> [W]e do not have the information to identify the plaintiffs' private browsing sessions. I know [Plaintiffs' counsel] doesn't like that, but that is the reality.

Apr. 29 Hr'g Tr. 24:1-13.

> I'm going to say, we don't track people in private browsing mode.

Apr. 29 Tr. 25:20.

89.   Google repeatedly misrepresented to Plaintiffs and the Court that preserving relevant data would require preserving the logs in their entirety and that Google had no method of readily querying private browsing data.

C.   Google Failed to Comply with Multiple Court Orders to Produce Plaintiffs' Data and Identify Relevant Data Sources

1.   The Court's April 30, 2021 Order Re: Production of Plaintiffs' Data

90.   During the *Calhoun* portion of the April 29, 2021 hearing, the Court noted:

> I think that the request is appropriate for Google to turn over the information it has on the named plaintiffs, the profile data, and if there is more robust profile data that is created for Google employees and that – that would seem to be the appropriate level of production, along with the device data, whether or not it's – whether or not it can authenticate it's only

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used by this plaintiff, but any device data associated with plaintiffs and the more robust profile data.

Apr. 29 *Calhoun* Hr'g Tr. 46:16-24. And during the *Brown* portion of the April 29, 2021 hearing, the Court provided the following guidance to Google:

> Well, but ***what the Plaintiffs are asking for is pieces of information from different places because they want to see if they can piece together, by combination of that information, class members***. And that's why – I mean, ***it seems to me that they have a right to try to do that with whatever information you have***.

Apr. 29 Hr'g Tr. 19:2-7 (emphasis added). The Court further instructed Google that Plaintiffs "can test it. They can test it and they can make of the data what they will." *Id.* at 20:7-8.

91. The Court directed, "for the named Plaintiffs, that any authenticated data that Google has is produced . . . as well as any unauthenticated data to the extent there is any." *Id.* at 24:22-25:2. The Court ordered that the production be complete by May 12, 2021. *Id.*

92. The Court confirmed its ruling in a written order the following day, which stated:

> For RFP Nos. 10 (class identification) and 18 (individuals' data), as an initial step, Google will produce identification data for the named Plaintiffs. Google will promptly supplement any production made to date with authenticated data identifiers as to both the individuals and their devices provided Plaintiffs have provided the necessary device information, as well as unauthenticated data.

Dkt. 147-1 at 2.

93. In a May 12, 2021 letter, Google agreed that, "if Plaintiffs provide Google with their unauthenticated identifiers, Google will provide data associated with those identifiers as well, to the extent any exists." Pls.' Oct. Sanctions Mot. Ex. G at 2 (Dkt. 292-8 at 2).

94. On May 26, 2021, the parties made a joint submission to the Court. Plaintiffs explained that Google was refusing to query its data based on identifiers associated with the named Plaintiffs, like IP addresses and device IDs:

> Google is refusing to run searches on the unauthenticated data, based on data produced with the authenticated, although Google's own internal search tool can easily search such data. GOOG-BRWN-00028920 (screenshot of tool). For example, Google can search based on IP addresses and device IDs, both of which Google already has with the "authenticated data." But Google refuses to do so. In short, Google is refusing basic discovery on how it is collecting data for "unauthenticated users," including its undisclosed ████████, when the allegations are at the core of this case.

Joint Submission (Dkt. 177 at 8-9).

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95.   During the June 2, 2021 discovery hearing, the Court again instructed Google that Plaintiffs were entitled to their data:

> I think it is ***appropriate for Plaintiffs to be able to test that statement and that position*** in some fashion, whether it is flat out the clean room proposal or something else, some other form of access, but there needs to be some way for the Plaintiffs to understand and to test or challenge whether or not these unauthenticated identifiers can be derived from authenticated identifiers.

June 2, 2021 Hr'g Tr. 33:1-7 (emphasis added). The Court subsequently ordered the parties to brief P3 (class member data), P6 (class member identification), and P16 (X-Client Data) disputes, including Plaintiffs' request for cleanroom access to tools that could query Google's data and Plaintiffs' request for the production of data lacking any X-Client Data Header. Order Ex. A (Dkt. 191-1 at 2).

96.   In their Court-ordered brief on P3 and P6, Plaintiffs requested that Google comply with the Court's April 30, 2021 order by producing "all data linked or mapped to any identifier associated with Plaintiffs or their devices, including without limitation all data associated or mapped with authenticated, unauthenticated, device-based, pseudonymous, or any other identifiers, such as mapped Biscotti IDs and device identifiers mapped to their Google Analytics IDs." Dkt. 199 at 1.

97.   In response, Google represented to the Court that it had "already produced authenticated data and relevant unauthenticated data." Dkt. 211 at 1.

98.   The parties filed their Court-ordered joint discovery letter brief regarding Dispute P16 on July 9, 2021 (Dkt. 218).

99.   In their brief, Plaintiffs explained that they sought this data to "identify class members and determine what data Google collected (and continues to collect) from their private browsing activities, using the empty X-Client-Data header field as the starting point." *Id.*

100.   In opposition, Google represented that producing the information sought would be "burdensome and not proportional because Google would have to produce records (including confidential business information related to fields collected) that have nothing to do with the claims at issue here." *Id.* at 9.

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101.   Google did not inform the Court or Plaintiffs that Google had, for ***four years***, been using at least two bits to log Incognito traffic in ▮ Google logs (is_chrome_incognito and is_chrome_non_incognito)—using the absence of the X-Client Data Header as one factor (the "starting point" proposed by Plaintiffs).

102.   Google also did not inform the Court that within just the last month Google had implemented the "maybe_chrome_incognito" bit within ▮ additional Google logs—also using the absence of the X-Client-Data Header as a criterion (again, the relevant "starting point" proposed by Plaintiffs).

103.   Because Google did not disclose these facts, Plaintiffs were limited to arguing about what Google *could or might* do with the X-Client Data Header, with Google hiding from Plaintiffs (and the Court) what Google had *actually* been doing for years.

104.   The Court referred these disputes to Special Master Brush (Dkt. 220 at 2). In response to the Special Master's request that Google summarize its data production to date, Google admitted on September 14, 2021 that "Google has not produced data keyed to the following information Plaintiffs provided":

- "User-agent. Google does not use user-agents as identifiers and user-agents are not sufficiently unique to identify individual users."

- "X-Client-Data header. Google does not use X-Client-Data-Header as an identifier and the header is not sufficiently unique to identify any individual user."

- "IP Address. Google does not use IP address as an identifier and IP addresses are not a reliable means to identify individual users."

- "NID cookies (aka Zwieback). This is a cookie Google does not use for Display Ads but rather uses to optimize Google.com search results, which is out of scope."

Pls.' Oct. Sanctions Mot. Ex. H at 1 (Dkt. 292-9 at 1). Google further objected to producing *authenticated* data, stating: "Because Plaintiffs' allegations are limited to specific unauthenticated data (data Google receives when a user is in a private browsing mode and logged out of their Google Account), Google has not identified those potential sources of ESI that contain only

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authenticated data (data Google receives when a user is logged into their Google Account)." Pls.' Oct. Sanctions Mot. Ex. I (Dkt. 292-10).

> 2. The Court's September 16, 2021 Order Re: Production of Plaintiffs' Data

105.   On September 16, 2021, the Court issued a further order concerning Google's production of data and the Special Master process. That order outlined three steps that the parties were to follow under the supervision of the Special Master (Dkt. 273 at 1-2).

a. *First*, by "September 17, 2021, Google will identify to the Special Master and Plaintiffs all databases and data logs (collectively, 'data sources') that may contain responsive information." *Id.* at 1. The Court further directed that "[f]or each data source, Google will provide, at a minimum" the "name of the database or data log," "a description of the data source's purpose and function," and various categories of information about the logs' retention. *Id.* at 1-2.

b. *Second*, for data sources that Plaintiffs selected to be "subject to searches and production for responsive records," Google "will provide at a minimum: (1) the data schema; (2) definitions and descriptions of each field; (3) tool(s) which Google employees ('Googlers') use to search each data source; and (4) instruction sets and manuals for all tools identified as being used by Googlers to search any data source identified in this step . . . ."

c. *Third*, the "Special Master will supervise a meet and confer with the Parties to create search strings for each data source and agree upon a production format. The Special Master will officiate and resolve disputes." *Id.* at 2.

d. The Court noted its expectation "that the productions that will result from this process will be completed by the October 6, 2021 deadline previously ordered by this Court…." *Id.*

106.   Google failed to comply with Step 1 of the Court's September 16, 2021 Order, which made it impossible to carry out Steps 2 and 3.

107.   In connection with Step 1, Google failed to identify (a) any of the █ logs in which the "is_chrome_incognito" and "is_chrome_non_incognito" fields had been logged since 2017 and (b) all but ██ of the █ logs in which the "maybe_chrome_incognito" fields had been logged since June and July 2021.

108.   Plaintiffs nevertheless requested that Google run searches against the logs it did identify. Google refused to run the following searches:

> Google does not agree to search for or produce Biscotti or Zwieback identifiers associated with [Plaintiffs'] IP addresses because such a production would include information associated with users who are not Plaintiffs and who have not consented.

> Google does not agree to search for or produce Biscotti or Zwieback associated with [specific device identifiers] because such a production would include information associated with users who are not Plaintiffs and who have not consented.

Pls.' Oct. Sanctions Mot. Ex. F (Dkt. 292-7).

109.   On October 14, 2021, Plaintiffs filed a Motion Seeking Relief for Google's Failure to Obey Discovery Order (Dkt. 292). Plaintiffs' motion sought "compliance with the Court's April 30 Discovery Order . . . or, in the alternative, an order establishing certain facts and precluding Google from opposing class certification or making other arguments in this case in connection with the withheld materials." *Id.* at 1.

110.   The Special Master subsequently informed the Court of his plan to issue a Report and Recommendation regarding certain disputes, and the Court stayed further briefing on Plaintiffs' Motion "pending resolution of the issues set forth in the forthcoming Report and Recommendation" (Dkt. 297).

111.   On October 20, 2021, the Special Master issued his Report and Recommendation, finding as a "fact" that Plaintiffs' data had "not yet been fully produced" (Dkt. 299 ¶ 53).

3.   The Court's November 12, 2021 Order Regarding Production of Plaintiffs' Data

112.   On November 12, 2021, the Court issued an order concerning the Special Master's Report and Recommendation. On *de novo* review, the Court upheld the Special Master's factual finding that Google had not produced Plaintiffs' data:

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[T]he Court finds that the Special Master's factual conclusions regarding the deficiencies in Google's production of information about searches conducted to date as well as production of Plaintiffs' and putative class data . . . are well founded and adopts those findings. As previously noted by this Court, Google knows what data it has collected regarding Plaintiffs and putative class members and where the data may be found, therefore Google must produce the information and data as directed herein.

(Dkt. 331 at 3).

113.   The Court further ordered an iterative search process. In doing so, the Court overruled Google's objections to "overbreadth and burden." *Id.* at 4. The Court noted that to the extent the order "requires the significant commitment of time, effort, and resources across groups of engineers at Google on very short timelines, that burden is in proportion to the demands of these class litigations and arises, at least in part, as a result of Google's reticence thus far to provide critical data source information in these actions." *Id.* at 4-5. The specifics of the process directed by the Court's order were as follows:

a. The Court ordered that "Google shall provide a declaration, under penalty of perjury from Google, not counsel, that 1. To the best of its knowledge, Google has provided a complete list of data sources that contain information relevant to Plaintiffs' claims; and 2. All responsive data related to the Named Plaintiffs have been produced from all searched data sources in the respective prior searches . . . ."

b. The Court further ordered that "within four days of the date of this Order Google is to provide to the Special Master full schemas, a list of ALL fields with their descriptions" and other information for "data sources Plaintiffs specify" from the "list of potentially relevant data sources provided by Google . . . ." *Id.* at 8. In other words, full schema should have been provided by no later than November 16, 2021.

c. The Court's order permitted Plaintiffs to propose "search terms" to the Special Master within "two days of Google's compliance" with the requirement to produce full schema. *Id.* The Court anticipated this would occur by November 18, 2021. The Court's order required Google to complete the search and provide results to the Special Master "within three days," *i.e.*, by November 21, 2021.

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d.   The Court ordered that Plaintiff could then conduct up to three additional, iterative searches, in which (1) Plaintiffs would submit updated search criteria within "two days of receipt of productions" and (2) Google would produce search results "within three days of being provided with updated search criteria . . . ." *Id.* Based on these timelines, the Court's order contemplated that the iterative search process and Google's productions would be complete by no later than the end of December 2021.

i)   ***Google Files Golueke Declaration Without Disclosing All Logs Containing Incognito-Detection Fields***

114.   On November 18, 2021, Google filed the Court-ordered declaration, signed by Andre Golueke, a Discovery Manager within the Legal Department at Google (Dkt. 338 at 1).

115.   The Golueke declaration filed by Google stated: "To the best of my knowledge and informed understanding, Google has provided a complete list of sources that contain information about Plaintiffs relevant to Plaintiffs' claims. The data sources are listed in Exhibit A." Golueke Decl. ¶ 3 (Dkt. 338).

116.   This statement, as Google now concedes, was false. Exhibit A to Mr. Golueke's declaration, filed by Google, did not include (1) any of the ▮ logs in which Google has logged "is_chrome_incognito" and "is_chrome_non_incognito" fields since 2017 and (2) ▮ of the ▮ logs in which Google has logged the "maybe_chrome_incognito" field since June and July 2021.

117.   The Golueke declaration filed by Google further stated: "To the best of my knowledge and informed understanding, Google either has or is in the process of producing all responsive and relevant data related to the Named Plaintiffs—or to pseudonymous identifiers Plaintiffs provided—from respective prior searches of those data sources." Golueke Decl. ¶ 4 (Dkt. 338).

118.   This statement, too, was false. Google had not even begun notifying publishers whose consent Google contends it requires to produce Plaintiffs' data. Forthcoming Ex. (Apr. 15, 2021 Email from Google Counsel to Special Master Brush). As of the date of the evidentiary

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hearing on Plaintiffs' Motion (April 21, 2022), Google has still not completed its notification of such publishers, or Rounds Two or Three of the iterative searches ordered on November 12, 2021, and Google anticipates it will only be in a position to complete production of a subset of Plaintiffs' data from "priority" publishers by May 20, 2022. *Id.* That date falls well over a year after the Court ordered Google to produce all of Plaintiffs' data and coincides with the deadline for rebuttal expert reports in this case.

119.   Exhibit A to the Golueke declaration disclosed just ▆ of the ▆ logs in which Google had implemented the "maybe_chrome_incognito" field: (1) ▆▆▆▆▆ and (2) ▆▆▆▆▆ .

ii)   *Google Provides Schema Without Disclosing Incognito-Detection Fields*

120.   On December 2, 2021, Google provided schema for the ▆ logs containing the "maybe_chrome_incognito" field, but without disclosing the existence of the "maybe_chrome_incognito" field. Reply Mao Decl. ¶ 4 (Dkt. 536-1).

121.   The schema Google produced did not reflect the "maybe_chrome_incognito" field in either log. Rather than produce the "full schemas" and a "list of ALL fields with their descriptions," as the Court ordered, Google only produced field names for the "100 largest fields" in the ▆ ▆ logs with the "maybe_chrome_incognito" field. Reply Mao Decl. ¶ 4 (Dkt. 536-1).

122.   Google's unilateral decision to provide only some of the fields, contrary to the Court's prior order, ensured that Google could continue to conceal the "maybe_chrome_incognito" field, as the field is expressed in a Boolean bit which requires less storage than any numerical integer. Thompson Decl. ¶ 20 (Dkt. 536-8).

123.   The Court finds that Google could and should have provided a more complete version of the schema for any logs that included the maybe_chrome_incognito bit but that Google chose not to. For certain other logs that apparently do not include an "incognito" field, Google initially produced more than the 100 largest fields. For instance, on September 24, 2021, Google

identified ▮ fields in its ▮▮▮▮▮▮▮ log, ▮ for the ▮▮▮▮▮▮▮ , and ▮ fields for ▮▮▮

▮ . Opening Mao Decl. ¶ 19 (Dkt. 430-1); Reply Mao Decl. ¶ 5 (Dkt. 536-1). In March 2022, after

Plaintiffs filed their Sanctions Motion, Google promptly provided a more complete schema for the

logs that contain the maybe_chrome_incognito bit. Reply Mao Decl. ¶¶ 5-6 (Dkt. 536-1).

iii)   ***Google Employee Liao Does Not Disclose Incognito-Detection Fields***

124.   On December 3, 2021, the day after Google produced incomplete schema for the

▮ identified logs with the "maybe_chrome_incognito" field, Plaintiffs deposed Chris Liao.

125.   As his subordinates were refining their Incognito detection efforts, Mr. Liao

testified that Google abandoned any efforts to identify Incognito traffic within its logs. When

asked if Google "explore[d] whether or not you would use the X-Client Data header as a signal"

for detecting Incognito traffic and "what was the conclusion on that?" Mr. Liao responded: "Yes .

. . . We did explore the use of [X-Client-Data Header]. In the end it was determined that the

accuracy of using that header as the indication for incognito mode is rather low." Mot. Ex. 8, Liao

Tr. 136:2-11 (Dkt. 430-9). Mr. Liao likewise testified:

> [T]here was discussion around proxy signals that we can use to approximate incognito traffic. However, we were not able to identify any definitive or reliable signal to identify incognito mode in the end.

Mot. Ex. 8, Liao Tr. 133:23-134:3 (Dkt. 430-9).

> [I]t was determined that there was no reliable way to technically detect incognito in a definitive and reliable and accurate manner. And as a result, ***no further action was taken to build such a hypothetical signal***.

Id. 134:15-20 (emphasis added).

> As I stated before, we do not have a reliable ***signal to infer incognito*** mode at this time we receive an ad query. And as a result, we are also unable to infer incognito mode using the same set of signals from the logs.

Id. 140:6-10 (emphasis added).

126.   In fact, Google was by that time using the undisclosed Incognito-detection bits with

the X-Client-Data Header to log traffic as "incognito" within ***at least*** ▮ ***logs***, including in (i) the

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1   ████ logs that Chris Liao was directly involved in for the maybe_chrome_incognito bit and

2   (ii) at least ██ logs for the "is_chrome_incognito" bit where the proto comments say ████

3   ██ (saying nothing about any

4   inaccuracy). *See* Reply Ex. 1, Letter from Google's counsel (Dkt. 536-2).

5   127.   Mr. Liao now attempts to justify his sworn testimony by stating that (i) he

6   unilaterally interpreted the word "signal" to require that it must be "reliable" and for a "dedicated

7   purpose" and (ii) he would therefore use the term "heuristic" rather than "signal" to describe

8   Google's logging of Incognito traffic. Liao Decl. ¶¶ 5, 7, 13 (Dkt. 528-3). But the only examples

9   he gives concerning the purported inaccuracy of the maybe_chrome_incognito signal would make

10 it *over*-inclusive. Nothing in his declaration refutes Plaintiffs' assertion that the bit accurately

11 identifies incognito traffic and that the traffic can be flagged and preserved.

12   128.   The Court finds that Mr. Liao's December 3, 2021 deposition testimony was at best

13 misleading.

14 **III.   Discovery of Google's Misconduct**

15   129.   On November 24, 2021, Google produced an email concerning Mr. Leung and his

16 work to identify Incognito traffic. In that July 2020 email, Mr. Leung discussed a "log analysis of

17 Chrome Incognito" and identified ██ particular logs that Mr. Leung was studying for this

18 analysis. Mot. Ex. 18, GOOG-CABR-05280756 (Dkt. 430-19).

19   130.   One of logs that Mr. Leung was studying, the ████████████, had not yet

20 been disclosed to Plaintiffs through the Special Master process. Plaintiffs promptly identified this

21 missing log for the Special Master. After reviewing the documents, the Special Master directed

22 Google to produce the log schema and to run searches of the log. Opening Mao Decl. ¶ 28 (Dkt.

23 430-1); Forthcoming Exhibit (Dec. 21, 2021 Email from Mr. Schmidt to Google's counsel).

24 Special Master Brush thus overruled Google's objection that the log was irrelevant to Plaintiffs'

25 claims insofar as it was a "Search" log.[1]

26 _____

27 [1] Plaintiffs take the position that the ████████ log is also a display ad log. *See* Dkt. 371 at 14 & n.4.

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131.   Given the clear relevance of Mr. Leung's log analysis, Plaintiffs then asked Google to produce custodial documents from Mr. Leung's files, with a more limited set of search terms and time period than was used for other custodians (Dkt. 399). Google objected, principally contending that Plaintiffs could not show "good cause" to add another custodian above the limit the Court had previously set. *Id.* Plaintiffs responded that Google had never disclosed Mr. Leung as a potential custodian with relevant information and likewise delayed in producing documents about his role in the Incognito detection analysis. *Id.*

132.   The Court agreed with Plaintiffs, ordering Google to provide hit counts for the limited set of search terms that Plaintiffs requested (which Google had previously refused to provide to Plaintiffs) (Dkt. 401). When Google did that, it turned out that Plaintiffs' proposal hit on just ███ documents, and Google shortly thereafter made a production from Mr. Leung's custodial files. Opening Mao Decl. ¶ 5 (Dkt. 430-1).

133.   Google's February 18, 2022 production of documents from Mr. Leung's files showed, for the first time, that Google had actually implemented "maybe-chrome-incognito" in Google logs. Mot. Ex. 9, GOOG-BRWN-00845312 at -18 (Dkt. 430-10) (Leung: "are we already logging maybe-chrome-incognito in search ███ already?" Liu: "yes").

134.   Shortly after making this production to Plaintiffs, Google unilaterally insisted that Mr. Leung's scheduled February 25, 2022 deposition be moved to March 4, 2022—the final day of fact discovery. Opening Mao Decl. ¶ 25 (Dkt. 430-1 ¶ 25).

135.   Mr. Leung's custodial documents also revealed that Google engineer Mandy Liu was centrally involved in Google's efforts to develop and implement maybe_chrome_incognito. *See* Mot. Exs. 22-24 (Dkts. 430-23 to 430-25) (instant messages between Mr. Leung and Ms. Liu).

136.   After reviewing Mr. Leung's documents, Plaintiffs promptly moved to compel Google to produce custodial documents from the files of Ms. Liu, again using limited search terms and time periods. Over Google's objection, this Court ordered production of Ms. Liu's custodial documents and permitted Plaintiffs to depose her for two hours, notwithstanding that Plaintiffs had already selected all twenty of their allotted depositions. Dkt. 437.

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137.   On March 2, Google produced documents from Ms. Liu's files.

138.   Ms. Liu's documents established that Google perfected the accuracy of maybe_chrome_incognito such that it now matches the "expected 3.08%" that Google considers to be the "ground truth" for Chrome Incognito traffic. *Compare* Reply Mao Decl. Ex. 5, GOOG-CABR-03849022 at -022 (Dkt. 536-6) (email from Mr. Leung characterizing Chrome's UMA data (3.08%) as the "ground truth" for their Incognito detection analysis); *with* Reply Mao Decl. Ex. 4, GOOG-BRWN-00846508 at -08 (Dkt. 536-5) ("Good news: Chrome incognito rate is ~3%!").

139.   During Ms. Liu's deposition, on March 8, 2022, she explained that Google perfected the accuracy of maybe_chrome_incognito by "exclud[ing] mobile app traffic from Chrome traffic." Pls.' Supp. Ex. 4, Liu Tr. 40:10-20 (Dkt. 511-5).

140.   On the final day of fact discovery, March 4, 2022, Plaintiffs served a single-topic Rule 30(b)(6) deposition notice seeking corporate testimony concerning any Google Incognito detection bit, including the maybe_chrome_incognito bit, and the two other Incognito detection bits that Plaintiffs uncovered through the Special Master process during the final week of discovery—is_chrome_incognito and is_chrome_non_incognito. Supp. Mao Decl. ¶¶ 9-11.

141.   On March 1, 2022, Google agreed to designate Dr. Caitlin Sadowski to testify about the latter two bits.

142.   On March 10, 2022, during Dr. Sadowski's deposition, Plaintiffs learned for the first time that Google had been using these bits to log traffic as Incognito in ▮ Google logs since 2017. *See* FOF ¶¶ 14-18.

143.   On March 10, also during Dr. Sadowski's deposition, Google for the first time identified Quentin Fiard as a person knowledgeable about Google's Incognito-detection bits. *See* FOF ¶¶ 18-20, 53.

IV.   <u>Google Provides No Justification for Its Misconduct</u>

144.   Google's filings in response to Plaintiffs' Motion (Dkt. 528 with supporting declarations) provide no justification for Google's discovery misconduct.

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145. Google's filings confirm the key facts warranting a finding of discovery misconduct without sufficient explanation or justification.

A.   Google's Contentions Regarding Prior Productions

146. Google cites documents it produced concerning these Incognito-detection bits (*see* Opp. at 4-6, 12), but those productions do not excuse or justify Google's failure to otherwise disclose those Incognito-detection bits or other misconduct.

147. First, Google cites <u>no</u> produced document concerning Google's "is_chrome_incognito" bit, even though that bit has been used by Google ever since 2017.

148. Second, Google cites only <u>one</u> document concerning Google's "is_chrome_non_incognito" bit, which indicated the bit had "only been used by the ███████ team" Trebicka Decl. Ex. 15, GOOG-BRWN-00176433 at -34 (Dkt. 528-7).

149. Other documents subsequently produced by Google indicate that the logs in which these bits appear are also used by Ads—undercutting Google's assertion that ██████ logs are exclusively Search logs. *Compare* Opp. at 14, *with* Forthcoming Exhibit, GOOG-CABR-03655976 (discussing "goals of using [███████] in Display Ads"); Forthcoming Exhibit, GOOG-CABR-04773208 at -09 (describing the ██████ format . . . [as] a Google-wide (not Ads-specific) location specific proto"); Forthcoming Exhibit, GOOG-CABR-04207001 at -01 (document discussing "'Display Sell-side Request Processing with Unified GeoLocation"); Forthcoming Exhibit GOOG-CABR-03848221 at -26 (discussing interaction between ███████████ and ████, Google's front-end decision logic for display ad serving).

150. Third, not one of the handful of documents cited by Google concerning the "maybe_chrome_incognito" bit indicated that the "maybe_chrome_incognito" bit was fully approved and implemented. For example, the May 4, 2021 design document cited by Google (Trebicka Ex. 13, GOOG-CABR-03668216 (Dkt. 528-7) indicates it was only approved by 4 out of 5 required "approvers."

151. Google's reliance on the May 4, 2021 document is also insufficient given that it reflected an older plan to log in ████ logs, which was abandoned. Opening Mao Decl. ¶ 3 (Dkt.

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430-1). Google did not produce the updated version of the plan document until January 31, 2022. *Id.* Google provided no explanation for withholding that updated document. Reply Mao Decl. ¶ 10 (Dkt. 536-1).

152.   Other documents cited by Google (Trebicka Decl. Ex. 12, GOOG-CABR-00901891, Trebicka Ex. 17, GOOG-CABR-03669472, Trebicka Ex. 18, GOOG-CABR-03669574 (Dkt. 528-7)) all indicated that this "data source factory will be implemented and registered in a subsequent CL," suggesting it had not yet been implemented. That language, combined with the way "Maybe Chrome Incognito bit" was written in the document (not in the other way it is typically expressed as a field named "maybe_chrome_incognito") made it appear that a decision had not been finalized on whether to log an incognito bit.

B.   Google's Contentions Regarding Reliability of These Bits

153.   Google asserts that its Incognito-detection bits are "unreliable" and only used for "approximation of aggregate Chrome Incognito traffic" (Opp. at 1-2), but those Google assertions do not excuse or justify Google's discovery misconduct.

154.   Had Google identified the Incognito-detection bits and provided discovery focused on those bits, the reliability of Google's Incognito-detection bits is something the parties could have further explored in discovery, including through expert discovery.

155.   Google's Incognito-detection bits use more than just the absence of the X-Client-Data header (FOF ¶¶ 16, 140-41), and Google misled the Court, the Special Master, and Plaintiffs by relying on prior rulings concerning just the absence of the X-Client-Data header (especially given that Google had not disclosed the existence of these Incognito-detection bits with those prior rulings).

156.   Google cites the Special Master's denial of Plaintiffs' request for a sample of data where the X-Client-Data header was missing (Opp. at 7, citing Dkt. 299), but that issue was briefed and decided without Google disclosing or addressing these Incognito-detection bits.

157.   Plaintiffs' experts have determined that these Incognito bits can be used to reliably identify Incognito traffic (*see* Thompson Decl. ¶¶ 8-16 (Dkt. 536-8)), and it is prejudicial for

Google to make assertions regarding the reliability of these Incognito-detection bits after withholding relevant discovery concerning the bits.

C.   Google's Contentions Regarding Its Use of These Bits

158.   Google's contentions regarding its limited use of two of the Incognito-detection bits (is_chrome_incognito and is_chrome_non_incognito) in certain "██████ logs" (Opp. at 12-13) do not justify or excuse Google's discovery conduct regarding those bits.

159.   First, as bits specifically designed by Google to distinguish Chrome traffic originating from Incognito mode from traffic coming from non-Incognito mode, these two bits were very clearly relevant to the issues in this litigation, consistent with FRCP 26.

160.   Second, it is reasonable to believe that many putative class members could visit non-Google websites by first searching on Google.com, which makes Google records identifying searches in Incognito relevant to identifying class members.

161.   Third, Google's decision to withhold discovery regarding those Incognito-detection bits means that the Court (and Plaintiffs) cannot fully or adequately assess (and test) Google's assertions regarding any limited use of those bits.

162.   Fourth, Google's assertions regarding any limited use of those bits does not account for the fact that Google created these two Incognito-bits in GWS, which meant that Google could use these bits with all GWS logs, not just the ██████ logs. Thompson Decl. ¶¶ 16-18 (Dkt. 536-8).

163.   The Court rejects Google's claim that discovery on these bits was "entirely irrelevant." Opp. at 14.

D.   Google's Contentions Regarding Limited Production of Documents Involving These Employees

164.   Google asserts that Plaintiffs should have identified Mr. Liao, Mr. Leung, and Ms. Liu as custodians based on other Google productions (Opp. at 11), but those productions do not excuse Google's omission of those individuals from Google's prior discovery responses.

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165.   Google should have identified Mr. Liao, Mr. Leung, Ms. Liu, and Mr. Fiard in the list of individuals provided in February 2021 and in its March 2021 interrogatory response (*see* FF ¶¶ 44-55, 60 (non-disclosure), ¶¶ 18-21(Fiard as responsive to ROGs) ¶¶ 27-32, 131-36 (Leung as responsive to ROGs), ¶¶ 27-32, 137-42 (Liu as responsive to ROGs), ¶¶ 27-32, 61 (Liao as responsive)), and it is not enough to just point to other documents in Google's productions.

166.   Google's omission of those employees was inconsistent with this Court's instruction that there should be "no hiding the ball." June 2, 2021 Hr'g Tr. 52.

E.   Google's Contentions Regarding Production of an Employee List in *Calhoun*

167.   Google asserts that it made certain disclosures in *Calhoun* that should have caused the *Brown* Plaintiffs to identify these individuals sooner (Opp. at 11), but those disclosures in *Calhoun* provide no justification for Google withholding that information in *Brown*.

168.   While Mr. Liao was selected as a custodian in *Calhoun*, Google opposed efforts by the *Brown* Plaintiffs to obtain that information. *See* FF ¶¶ 57-62.

169.   Google only cross-produced the *Calhoun* list (identifying Chris Liao, Bert Leung, and Mandy Liu, but not Quentin Fiard) in *Brown* on September 1, 2021, after the August 24 deadline set by the Court for identification of custodians in *Brown*.

170.   Metadata from the *Calhoun* list indicates it had been created by Google on January 20, 2021, but it was not shared with the *Brown* plaintiffs until September 1, 2021.

171.   That document listed Mandy Liu, Bert Leung, and Chris Liao, but it did not disclose their work on Google's development of the "maybe_chrome_incognito" field.

172.   That document also did not identify Quentin Fiard, whom Google's 30(b)(6) representative (after the close of fact discovery) identified as knowledgeable on the 2017 "is_chrome_incognito" and "is_chrome_non_incognito" fields.

173.   Google has provided no explanation for why it did not disclose those witnesses to the *Brown* Plaintiffs in (a) its February 2021 custodian list in response to RFP Nos. 11-12 or (b) its March 2021 response to Interrogatory No. 4. Nor has Google provided *any* explanation for its failure to disclose Mr. Fiard.

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F.   Google's Contentions Regarding Mr. Golueke's Declaration

174.   On November 18, 2021, in response to the Court's order, Google submitted the sworn declaration of Mr. Golueke listing certain data sources. Dkt. 338.

175.   With its response to Plaintiffs' Sanctions Motion, Google submitted a declaration by Mr. Golueke admitting that he "was not aware" that "the maybe_chrome_incognito[]bit existed" or that █████ "logs contained fields labeled 'is_chrome_incognito' or 'is_chrome_non_incognito mode.'" Dkt. 528-5 ¶¶ 10-11.

176.   Google's counsel also submitted a declaration (Dkt. 528-1), and Google's counsel does not deny that it was aware of these facts when Google submitted this sworn declaration to the Court in response to the Court's order.

177.   Mr. Golueke's declaration should have included a complete list of data sources Google has used (and was using at the time) to distinguish Incognito traffic from non-Incognito traffic, so that those data sources could be further investigated as part of the Special Master process.

178.   The Court finds that the missing logs were relevant to the process of identifying class members. Google should have included the missing logs in response to the Court's order.

179.   These findings are confirmed by the fact that the Special Master rejected Google's argument that the ████████████ Mr. Leung used in the Incognito detection analysis was outside the scope of this case and subsequently required Google to include it.

G.   Google's Contentions Regarding Mr. Liao Testimony

180.   On December 3, 2021, Mr. Liao testified that Google had no "reliable signal to infer incognito mode" and as a result was "unable to infer incognito mode using the same set of signals from the logs." Mot. Ex. 8, Liao Tr. 140-6-10 (Dkt. 430-9). Mr. Liao did not identify the maybe_chrome_incognito bit or any other incognito-detection bit. *Id.*

181.   Mr. Liao seeks to justify his response by stating that he interpreted the word "signal" to require that a signal must be for a "dedicated purpose" and that he would use the term "heuristic" rather than "signal" for the maybe_chrome_incognito bit. Liao Decl. ¶¶ 5, 7, 13 (Dkt. 528-3).

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182.   In the context of the questions asked, Mr. Liao could and should have revealed the existence and Google's use of the maybe_chrome_incognito bit, with which he was intimately involved.

H.   Google's Data Schema Contentions

183.   Google's Opposition also provides no justification for its omission of the Incognito-detection bits from its schema productions.

184.   Google nowhere claims that it was unaware of these Incognito-detection bits at the time that it was producing data schemas to the Special Master and Plaintiffs.

185.   Google could have readily identified these Incognito-detection bits for the Special Master and Plaintiffs along with the "largest 100 fields" in those data sources.

186.   The fact that Google produced more than 100 fields for sources that did not include the Incognito-detection bits (along with the other evidence) supports an inference that Google concealed the existence of these bits.

187.   The fact that Google was able to quickly produce more comprehensive schema for the logs containing the "maybe_chrome_incognito" field after Plaintiffs moved for sanctions supports an inference (along with the other evidence) that Google concealed the existence of these bits.

V.   Plaintiffs Have Been Prejudiced by Google's Discovery Misconduct

188.   The Court finds that the discovery and evidence at issue was relevant to both Plaintiffs' claims and Google's defense.

189.   The Court finds that Plaintiffs have been prejudiced by Google's discovery misconduct in multiple ways.

A.   Plaintiffs Were Unable to Obtain Relevant Documents

190.   Because Google did not identify Bert Leung, Mandy Liu, and Quentin Fiard early on, they were not included as document custodians during the early part of this case (and Mr. Fiard never became one).

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191.   When Plaintiffs sought documents from Bert Leung and Mandy Liu over Google's objections near the end of fact discovery, the productions were based only on limited search terms and dates, where Google objected that production would be unduly burdensome.

192.   Because Quentin Fiard was not identified by Google until March 10, 2022, during the 30(b)(6) deposition of Dr. Sadowski, Plaintiffs never obtained his custodial documents.

193.   Google did not otherwise seek to supplement its productions with all non-custodial documents concerning these Incognito-detection bits.

194.   Google identified no produced documents regarding is_chrome_incognito and only one document concerning is_chrome_non_incognito.

195.   Without further production, it is not possible to identify whom in addition to Mr. Fiard might have relevant documents concerning the Incognito-detection bits.

B.   Plaintiffs Were Unable to Obtain Relevant Testimony

196.   Had Plaintiffs known about these Incognito-detection bits and had Google produced documents concerning them earlier in the case, Plaintiffs could have used such evidence during depositions of any number of Google witnesses.

197.   Plaintiffs also would have been able to identify and depose other individuals with knowledge about the Incognito-detection bits, including Mr. Fiard.

198.   Given the late depositions of Mr. Leung and Ms. Liu, Plaintiffs were unable to notice and take additional depositions tied to their testimony.

199.   Given the late discovery of Ms. Liu's role in developing the Incognito-detection bit and given Google's objections to Ms. Liu's deposition, Plaintiffs only had two hours during which to depose Ms. Liu.

C.   Plaintiffs Have Been Prejudiced in The Special Master Process

200.   Google's belated disclosures of these Incognito-detection bits undermined Plaintiffs' ability efficiently and timely obtain relevant data through the Special Master process.

201.   The deadline for Plaintiffs to submit opening expert reports was April 15, 2022 (except for Plaintiffs' damages report, which is due on April 22) (Dkt. 537). Yet for Search 1 and

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Search 2, Plaintiffs have not yet received any data from any of the logs with the maybe_chrome_incognito bit. *See* Forthcoming Ex. (April 15, 2022 email from Google's counsel to Special Master Brush).

202.   Similarly, Google has not yet conducted any searches for any logs that contain the is_chrome_incognito or is_chrome_non_incognito bits, nor has Google produced complete schema for any such logs. Reply Mao Decl. ¶ 8 (Dkt. 536-1); April 15, 2022 email from Google's counsel to Special Master Brush). And Google has yet to confirm whether it is withholding any other bits used to detect Incognito traffic. Reply Mao Decl. ¶ 9 (Dkt. 536-1).

203.   Even if Google produced data now, Plaintiffs and their experts would no longer be able to verify the results.

D.   Plaintiffs Have Been Prejudiced in Expert Discovery

204.   Plaintiffs have also been prejudiced by Google's withholding of discovery related to these Incognito-detection bits in connection with expert discovery.

205.   The deadline for Plaintiffs to submit opening expert reports was April 15, 2022 (except for Plaintiffs' damages report, which is due on April 22). Dkt. 537.

206.   Because of Google's discovery misconduct, Plaintiffs did not obtain a complete production of data tied to the Incognito-detection bits (or other Incognito-related logging) for Searches 1 and 2 of the Special Master process.

207.   Plaintiffs were forced to submit their expert reports prior to receiving this data.

208.   Plaintiffs' experts have been unable to fully test these bits while discovery was open. Google has recently represented that data testing the bits would be produced by no later than May 20, 2022, when the parties' rebuttal expert reports are due. Forthcoming Ex. (Apr. 15, 2021 Email from Google Counsel to Special Master Brush). Even if Google produces data on or before May 20, 2022, Plaintiffs and their experts will not be able to verify the results.

E.   Plaintiffs Have Been Prejudiced by Google's Spoliation of Data

209.   Google has been spoliating data throughout the case, without taking any steps to modify its data retention policies to preserve potentially relevant data.

210.   Despite Plaintiffs' multiple inquiries about whether a subset of logged data could be identified as Incognito and preserved, Google repeatedly and falsely denied that it was able to do so. Google misled Plaintiffs and the Court by arguing that it would be required to preserve all logs in their entirety, and that doing so would necessarily present an undue burden.

211.   It now appears that Google was at the same time identifying Incognito traffic, that this traffic represents a tiny fraction of all logged data, and that Google can construct a custom log of only relevant fields. The targeted data Plaintiffs could have requested Google to preserve could have been relevant to identifying class members. It could also have been relevant to showing whether Google's conduct in intercepting Plaintiffs' private browsing information was "highly offensive"—an element of certain of Plaintiffs' claims.

212.   Should Plaintiffs prevail, absent class members may very well wish to know what data Google collected from their Incognito browsing sessions. And Plaintiffs may need their event-level data to identify what specific algorithms, products, and profits Google made with their data. Yet Google has been deleting such data throughout the case based on a misleading picture it presented to Plaintiffs and the Court concerning what would be required to preserve relevant data on behalf of the class.

F.   Plaintiffs Have Been Prejudiced in Terms of Rebutting Google's Contentions

213.   Google's discovery misconduct has prevented Plaintiffs from fully testing (i) Google's ability to identify Incognito traffic, (ii) the ability to link such traffic to class members' "authenticated" or Google Account data, and (iii) otherwise identify class members.

214.   Google has repeatedly argued in the case that these things are impossible (including in connection with this Order to Show Cause), but Google has prevented Plaintiffs from fully testing and attempting to refute those propositions via fact and expert discovery.

215.   By withholding relevant discovery focused on Google's Incognito-detection bits, and at the same time failing to preserve data, Google prejudiced Plaintiffs' ability to fully address the assertions by Google, its counsel, and its witnesses.

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CONCLUSIONS OF LAW

1.   "When a district court decides to impose sanctions or discipline, it must clearly delineate under which authority it acts to ensure that the attendant requirements are met." *Williams v. Williams*, No. 07-4464, 2013 WL 3157910, at *4 (N.D. Cal. June 20, 2013) (citing *Weissman v. Quail Lodge, Inc.*, 179 F.3d 1194, 1200 (9th Cir. 1999)).

2.   Federal courts have the power to sanction litigants for discovery misconduct under both the Federal Rules of Civil Procedure and the court's inherent power to prevent abusive litigation practices. *Leon v. IDX Sys. Corp.*, 464 F.3d 951, 958 (9th Cir. 2006).

3.   Plaintiffs seek sanctions under Federal Rule of Civil Procedure 37(b), Rule 37(c), Rule 37(e), and the Court's inherent power. The Court begins with Rule 37(b).

I.   Federal Rule of Civil Procedure 37(b)

4.   Under Federal Rule of Civil Procedure 37(b), where a party "fails to obey an order to provide or permit discovery," this Court may impose "whatever sanctions are just . . . up to dismissal of part or all of the party's claims." *Sanchez v. Rodriguez*, 298 F.R.D. 460, 463 (C.D. Cal. 2014).

5.   Plaintiffs argue that Google violated three discovery orders: (1) the Court's April 30, 2021 order requiring Google to produce all of the named Plaintiffs' "authenticated" or "unauthenticated" data (Dkt. 147-1 at 2); (2) the Court's September 16, 2021 order devising a three-step process for Google to produce the named Plaintiffs' data to be supervised by Special Master Brush (Dkt. 273); and (3) the Court's November 12, 2021 order re-starting the Special Master process with new requirements (Dkt. 331).

6.   The Court agrees with Plaintiffs that Google violated all three orders.

7.   The Court already made factual findings, which Google did not appeal, regarding Google's compliance with the April 30 and September 16 orders. In its November 12 Order, the Court on *de novo* review upheld Special Master Brush's factual finding that the named Plaintiffs' data had "not yet been fully produced." Dkt. 331 at 3. The April 30 order required Google to produce all of the named Plaintiffs' data, and the September 16 order set an October 6, 2021

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production deadline. The Special Master and the Court determined in November that Google did

not comply with these orders:

> [T]he Court finds that the Special Master's factual conclusions regarding the deficiencies in Google's production of information about searches conducted to date as well as production of Plaintiffs and putative class data . . . are well founded and adopts those findings. As previously noted by this Court, Google knows what data it has collected regarding Plaintiffs and putative class members and where the data may be found, therefore Google must produce the information and data as directed herein.

Dkt. 331 at 3. Google has not asked the Court to revisit these findings, and the Court sees no

reason to do so.

8.   The Court now concludes that Google also violated the November 12 order.

9.   The Court's order required Google to "provide a declaration, under penalty of

perjury from Google, not counsel, that [] To the best of its knowledge, Google has provided a

complete list of data sources that contain information relevant to Plaintiffs' claims." Dkt. 331.

10.   In response to that order, Google submitted the declaration of Mr. Golueke (Dkt.

338), swearing under oath that "To the best of my knowledge and informed understanding, Google

has provided a complete list of sources that contain information about Plaintiffs relevant to

Plaintiffs' claims."

11.   As discussed above, at that time, Google had not disclosed to Plaintiffs (or the Court

or Special Master) ▇ of the ▇ Google logs containing the maybe_chrome_incognito bit, nor any

of the ▇ Google logs containing the is_chrome_incognito and is_chrome_non_incognito bits.

12.   These logs all track Incognito traffic and therefore plainly contain information

relevant to Plaintiffs' claims, such that they should have been disclosed in September (Dkt. 273).

13.   Google violated the Court's November 12 Order by not disclosing those ▇ Google

logs in connection with Mr. Golueke's declaration, where Google should have updated its initial

list of logs and data sources to include them following the Court's November 12 Order.

14.   Google has no justification for its decision to not disclose those ▇ Google logs in

response to the Court's November 12 Order.

15.   Google's Opposition does not explain why Google failed to identify the ██ Google logs with maybe_chrome_incognito.

16.   As for the other two bits, the Court is not persuaded by Google's argument that they are only contained within "Search" logs and, according to Google, irrelevant to the claims. Opp. at 14.

17.   The Court's November 12 order was not limited to logs that contain the specific data alleged to have been intercepted, and the Order clarified that one purpose of the process was to give Plaintiffs the "tools to identify class members using Google's data." Dkt. 331 at 4. The is_chrome_incognito and is_chrome_non_incognito bits are such tools, and they should have been disclosed, along the ▌Google logs where they have been implemented.

18.   The Court in this respect is in agreement with the Special Master, who in December rejected Google's argument that "Search" logs are irrelevant to this process when he ordered Google to produce schema for the ████████████ log, which Bert Leung had studied for his 2020 Incognito detection analysis. FF ¶ 130.

19.   By that point, at latest, Google was on notice that it would need to identify Search logs that can be used to detect Incognito traffic and thus identify class members; yet Google still did not supplement its prior productions to include these ██ logs.

20.   Google also violated the portion of the November 12 Order requiring Google to, "within four days of the date of this Order . . . provide to the Special Master full schemas, a list of ALL fields with their descriptions" and other information for "data sources Plaintiffs specify" from the "list of potentially relevant data sources provided by Google . . . ." *Id.* at 8. Dkt. 331, Ex. 1.

21.   Google violated this aspect of the order by producing incomplete schema for some of the logs that Google identified, including by omitting the maybe_chrome_incognito field from the schemas Google provided for the only ██ logs Google identified that contain the maybe_chrome_incognito bit. FF ¶¶ 120-23.

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22.   The Court rejects Google's claim that this was justified based on feedback provided by the Special Master. Google argues that the Special Master granted Google's request to limit production to the "largest-100 fields" (Opp. at 15), but when Google requested this permission from the Special Master, Google had not yet disclosed the Incognito detection bits to Plaintiffs or the Special Master, let alone inform the Special Master that its limitation proposal would by definition exclude key Boolean fields that detect Incognito traffic. Trebicka Decl. Ex. 35, October 1, 2021 Letter from Google Counsel to Special Master Brush (Dkt. 528-7). Accordingly, Google may not rely on any purported permission from Special Master Brush.

23.   Having concluded that Google violated three discovery orders, the Court must assess whether and how to sanction Google. Plaintiffs specifically seek three sanctions:

1. Evidentiary sanctions in the form of an order precluding Google from making certain arguments.

2. A jury instruction that "Google concealed and altered evidence regarding its ability to identify Incognito traffic."

3. Reimbursement of all fees that Plaintiffs paid to Special Master Brush.

A.   Evidentiary Sanctions Are Warranted

24.   The Court begins with Plaintiffs' request for evidentiary sanctions. The parties agree that this Court has authority to impose this sanction. Opp. at 17.

25.   This Court may "prohibt[] the disobedient party from supporting or opposing designated claims or defenses, or from introducing designated matters in evidence." Fed. R. Civ. Proc. 37(b)(2)(A)(ii). "Preclusionary orders ensure that a party will not be able to profit from its own failure to comply." *Sas v. Sawabeh Info. Servs.*, 2015 WL 12711646, at *9 (C.D. Cal. Feb. 6, 2015) (quoting *United States v. Sumitomo Marine & Fire Ins. Co., Ltd.*, 617 F.2d 1365, 1369 (9th Cir. 1980)). "[I]t is entirely reasonable to sanction [Google's] defiance of the [numerous discovery] Order[s] by precluding [it] from presenting evidence on [issues for which Google] ha[s] not provided timely and complete discovery." *Id.*

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26.   The Court concludes that a preclusion sanction is warranted. As a result of Google's discovery misconduct, Google withheld relevant discovery until the very end of—and even until after the close of fact discovery. Plaintiffs did not get to depose the employees most knowledgeable about the maybe_chrome_incognito bit until March 4 (Mr. Leung, on the last day of fact discovery) and March 8 (Ms. Liu, four days after the fact discovery cutoff). FF ¶ 134-39. Google's 30(b)(6) witness only identified Mr. Fiard on March 10, six days after the close of fact discovery. As a result of Google's misconduct, Google also did not produce any data from any of the fields containing this bit for the only two searches that Google completed within the Special Master process. FF ¶ 142, 208.

27.   Google argues that Plaintiffs have not suffered any prejudice, claiming that Plaintiffs have now received discovery concerning the maybe_chrome_incognito bit. Opp. at 21-22. But sanctions are warranted regardless of that belated and limited discovery. "[I]t is well-established that '[b]elated compliance with discovery orders does not preclude the imposition of sanctions.'" *Sas v. Sawabeh Info. Servs.*, 2015 WL 12711646, at *7 (C.D. Cal. Feb. 6, 2015) (quoting *North American Watch Corp. v. Princess Ermine Jewels*, 786 F.2d 1447, 1451 (9th Cir. 1986)). "As the Ninth Circuit has explained, the '[l]ast-minute tender of documents does not cure the prejudice to opponents.'" *Sas*, 2015 WL 12711646, at *7 (quoting *Princess Erime Jewels*, 786 F.2d at 1451).

28.   Sanctions are appropriate because Google's withholding of relevant discovery concerning these Incognito-detection bits until the close of discovery (and after) deprived Plaintiffs of "a meaningful opportunity" to "comprehend" complex discovery. *Apple v. Samsung Elecs.* 2012 WL 1595784, at *3 (N.D. Cal. May 4, 2012).

29.   Google also does not dispute that Plaintiffs received virtually no discovery concerning is_chrome_incognito and is_chrome_non_incognito. FF ¶ 192-95. Google identified just one document alluding to just one of these bits. Opp. at 12 (citing Trebicka Decl. Ex. 15, GOOG-BRWN-00176433 (Dkt. 528-7)). Given the late identification of Mr. Fiard, Plaintiffs also never had an opportunity to seek Mr. Fiard's documents or question Mr. Fiard about these

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Incognito-detection bits. And Google has still not produced any data for these bits. FF ¶¶ 202, 206-08.

30.   Having concluded that evidentiary sanctions are warranted, the Court must decide how to sanction Google. Because Plaintiffs do not seek any sanction amounting to a default judgment, the only question is whether the sanction bears "a reasonable relationship to the subject of discovery that was frustrated by sanctionable conduct." *Navellier v. Sletten*, 262 F.3d 923, 947 (9th Cir. 2001). Google agrees that this standard applies. Opp. at 17.

31.   The Court exercises its discretion to issue a preclusion sanction and rules that Google is hereby precluded from making any arguments about any Incognito-detection bit for the duration of the case.

32.   Although there is no ascertainability requirement in the Ninth Circuit for class certification, *see Buffin v. City & Cty. of San Francisco*, 2018 WL 1070892, at *5 (N.D. Cal. Feb. 26, 2018) (Gonzalez Rogers, J.), Google's Opposition makes clear that it intends to oppose certification primarily on the ground that Plaintiffs cannot identify their class, including by arguing that these Incognito-detection bits are unreliable and cannot be used to identify class members. *See* Opp. at 7 (describing class member identification as a "dispositive class identification problem" and an "insurmountable obstacle").

33.   Google's violation of this Court's numerous discovery orders was plainly "designed to achieve a tactical advantage" with respect to Google's strategy, and such "obstruction should not be permitted to achieve its objectives." *Conway v. Dunbar*, 121 F.R.D. 211, 214 (S.D.N.Y. 1988). "Where the discovery misconduct has deprived the opposing party of key evidence needed to litigate a contested issue, an order prohibiting the disobedient party from contesting that issue . . . is appropriate." *Shanghai Weiyi Int'l Trade Co. v. Focus 2000 Corp.*, 2017 WL 2840279, at *11 (S.D.N.Y. June 27, 2017).

34.   Because Google withheld relevant discovery regarding these Incognito-detection bits until the close of fact discovery and after the close of fact discovery, and produced virtually nothing about is_chrome_incognito and is_chrome_non_incognito, the Court deems it appropriate

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1   to permit Plaintiffs to use the limited information they have to make their arguments about the

2   reliability of these Incognito-detection bits while precluding Google from making any

3   counterarguments. Google could have complied with this Court's orders and permitted fulsome

4   discovery into these Incognito-detection bits while reserving all of its arguments about their

5   relevance and reliability. Having instead engaged in the discovery misconduct described above,

6   Google lost that opportunity.

7   35.   As a result of its discovery misconduct, Google "thwarted [Plaintiffs'] efforts to

8   understand the basis of" Google's class identification arguments, so it is now "appropriate, based

9   on these failures, to preclude [Google] from introducing further facts or evidence in response to

10   these issues." *Lanier v. San Joaquin Valley Offs. Ass'n*, 2016 WL 4764669, at *8 (E.D. Cal. Sept.

11   12, 2016). Google will otherwise impermissibly benefit from evidentiary gaps that it has created

12   by refusing to comply with this Court's discovery orders.

13   36.   This sanction is appropriate despite Google's assertion that this will make it more

14   difficult for Google to oppose class certification. *Craftwood Lumber Co. v. Interline Brands, Inc.,*

15   2013 WL 4598490, at *13 (N.D. Ill. Aug. 29, 2013) ("Craftwood does not dispute that a preclusion

16   order would leave Interline without a basis for opposing class certification, but notes that this result

17   is of Interline's own making. We agree. The sanction is harsh but warranted").

18   37.   This sanction is also consistent with the principle that the sanction should "serve as

19   a general deterrent in both the case at hand and other cases." *Sas*, 2015 WL 12711646, at *10.

20   Google's discovery misconduct cannot be encouraged, and this sanction will appropriately serve

21   as a deterrent both to Google and other parties in other cases.

22   **B.   A Jury Instruction Is Warranted**

23   38.   Plaintiffs also seek a jury instruction that "Google concealed and altered evidence

24   regarding its ability to identify Incognito traffic."

25   39.   The Court has found that Google in fact concealed and altered evidence regarding

26   its ability to identify Incognito traffic, including by violating the Court's orders and concealing the

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existence of these Incognito-detection bits and producing incomplete versions of log schema that omitted these Incognito-detection bits. FF ¶¶ 107, 121-23.

40.   Rule 37(b)(2)(A) "authorizes a court to issue an adverse-inference jury instruction as a remedy when 'bad faith or gross negligence has resulted in either the spoliation of evidence or failure to turn over relevant evidence.'" *First Fin. Sec., Inc. v. Freedom Equity Grp., LLC*, 2016 WL 5870218, at *3 (N.D. Cal. Oct. 7, 2016). Google agrees that the Court has authority to impose the sanction that Plaintiffs seek. Opp. at 25.

41.   Rather than contest the Court's authority to impose such a sanction, Google argues that jury instructions are unwarranted since "Plaintiffs had detailed discovery on the purportedly withheld topic months before showing any interest in pursuing it," and that "once Plaintiffs did start asking questions, Google answered them." Opp. at 25.

42.   But as discussed above, contrary to Google's assertions, the handful of documents cited in Google's opposition did not confirm the approval and implementation of the maybe_chrome_incognito bit. FF ¶¶ 147-52. Moreover, Google did not provide any data for any of the ▮ logs with maybe_chrome_incognito within either Search 1 or Search 2 of the Special Master process. FF ¶¶ 201. Finally, Google has no response to Plaintiffs' argument with respect to the other two Incognito detection bits. Google has to this day produced just one document relating to one of those bits, and Plaintiffs were never able to depose the employee knowledgeable about them. FF ¶¶ 148, 197.

43.   Google next suggests that only this Court will decide whether class members can be identified, and that a jury instruction is therefore inappropriate. Opp. 25. But information about Google's detection and logging of incognito traffic bears on elements of Plaintiffs' claims, such as the offensiveness of Google's alleged misconduct for purposes of Plaintiffs' invasion of privacy and intrusion upon seclusion claims, and is therefore relevant to issues that will be presented to the jury. *See Davis v. Facebook, Inc.,* 956 F.3d 589, 602-04 (9th Cir. 2020).

44.   Finally, notably absent from Google's filings is any suggestion that Google's noncompliance with numerous Court orders was due to mere inadvertence. And while Google

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submits a declaration from its outside counsel, nowhere does that declaration suggest that counsel

were *unaware* of these Incognito-detection bits. While "the court does not need to find bad faith

before it issues an adverse-inference instruction as a sanction." *First Fin. Sec., Inc.*, 2016 WL

5870218, at *6, the record certainly suggests bad faith.

45.   The Court therefore Concludes that, at trial, the jury shall be instructed that "Google

concealed and altered evidence regarding its ability to identify Incognito traffic."

C.   Google Must Reimburse Plaintiffs for all Fees Paid to Special Master Brush

46.   Plaintiffs also seek reimbursement of all fees Plaintiffs paid to Special Master

Brush.

47.   Having already decided to grant Plaintiffs' Motion, the Court is required to consider

monetary compensation. "[T]he court must order the disobedient party, the attorney advising that

party, or both to pay the reasonable expenses, including attorney's fees, caused by the failure,

unless the failure was substantially justified or other circumstances make an award of expenses

unjust." Fed. R. Civ. P. 37(b)(2)(C).

48.   The Court concludes that Google's discovery misconduct was not "substantially

justified" that that there are no "other circumstances [that] make an award of expenses unjust."

49.   The Court rejects Google's argument that Plaintiffs may only receive compensation

for the time and expenses they incurred in filing the Sanctions Motion. Opp. at 25-26. Federal Rule

37(b)(2)(C) requires the offending party to "pay the ***reasonable expenses***, ***including*** attorney's

fees, caused by the failure." (emphasis added); *see also Sali v. Corona Reg'l Med. Ctr.*, 884 F.3d

1218, 1225 (9th Cir. 2018) (affirming sanctions for costs associated with court-ordered

deposition). Google's interpretation reads "including" right out of the Rule.

50.   Here, Google's compliance with the Court's prior orders would have significantly

streamlined the Special Master process, including by identifying logs to search. Google's

violations of the Court's order made the whole Special Master process far more time consuming

and expensive than it needed to be, and also less productive.

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51. The Court therefore orders Google to reimburse Plaintiffs for all of the fees they have paid and will pay to Special Master Brush. In addition, consistent with Rule 37, Google must pay all attorneys' fees and costs incurred by Plaintiffs in filing the Sanctions Motion, including expert consultant and witness fees. Within 14 days of this Order, Plaintiffs must submit to the Court their request for reimbursement.

II.   Federal Rule of Civil Procedure 37(c)

52. Plaintiffs are also entitled to sanctions under Federal Rule of Civil Procedure 37(c). This Rule provides: "If a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless." Fed. R. Civ. P. 37(c)(1). Federal Rule of Civil Procedure 26(e) in turn requires that any party "who has responded to an interrogatory . . . must supplement or correct its disclosure or response…in a timely manner if the party learns that in some material respect the disclosure or response is incomplete or incorrect, and if the additional or corrective information has not otherwise been made known." Fed. R. Civ. P. 26(e)(1)(A).

53. Courts have "particularly wide latitude" to issue sanctions under Rule 37(c)(1). *Yeti by Molly, Ltd. v. Deckers Outdoor Corp.*, 259 F.3d 1101, 1106 (9th Cir. 2001). Unlike Rule 37(b), it is not necessary for the Court to find that a violation of a court order has occurred because Rule 37(c)(1) is self-executing. *Id.* Google, "[t]he party facing sanctions[,] bears the burden of proving that its failure to disclose the required information was substantially justified or is harmless." *R&R Sails, Inc. v. Ins. Co. of Penn.*, 673 F.3d 1240, 1246 (9th Cir. 2012).

54. Sanctions are appropriate under Rule 37(c) because Google failed to disclose Chris Liao, Bert Leung, Mandy Liu, and Quentin Fiard in response to Plaintiffs' interrogatory asking Google to identify employees "with responsibility for or knowledge of . . . Google's collection of and use of data in connection with users' activity while in a private browsing mode." FF ¶¶ 44-47, 51-55. Google never amended that Interrogatory response. Nor does Google's Opposition even attempt to explain why Google omitted these employees from its interrogatory response. With

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respect to Mr. Fiard, Google only identified him on March 10, after the close of fact discovery. FF ¶¶ 143, 192.

55.   Based on Federal Rule 37(c), the Court now precludes Google from relying on any testimony from Mr. Fiard or any other employees who were not identified in response to Plaintiffs' interrogatory.

56.   In addition, Rule 37(c)(1)(A)-(B) permits the court to "order payment of the reasonable expenses, including attorney's fees, caused by the failure"; "inform the jury of the party's failure"; and "impose other appropriate sanctions, including any of the orders listed in Rule 37(b)(2)(A)(i)—(vi)."

57.   Google's failure to identify these employees in response to Plaintiffs' interrogatory (Liao, Leung, Liu, and Fiard) provides independent support for the Court's order requiring Google to reimburse Plaintiffs for all fees paid to Special Master Brush. Timely identification by Google of the employees responsible for the Incognito-detection bits would have led to the discovery of those bits and thus significantly streamlined the Special Master process, including by identifying logs that should have been searched, and also could have resulted in preservation of relevant data. Google's misconduct made the whole Special Master process far more time consuming and expensive than it needed to be and also far less productive and comprehensive.

58.   For the reasons discussed above with respect to Plaintiffs' request for sanctions under Rule 37(b), the Court further orders that the jury shall be instructed that "Google failed to disclose to Plaintiffs the names of key Google employees responsible for developing and implementing Google's Incognito-detection bits."

59.   Rule 37(c) also provides additional support for the Court's preclusion order. Google's failure to disclose these Google employees undermined Plaintiffs' ability to obtain any meaningful discovery into these Incognito-detection bits. Google is precluded from making any arguments about these Incognito-detection bits.

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III.   Federal Rule of Civil Procedure 37(e)

60.   Plaintiffs are also entitled to sanctions under Federal Rule of Civil Procedure 37(e), which provides: "If electronically stored information that should have been preserved in the anticipation or conduct of litigation is lost because a party failed to take reasonable steps to preserve it, and it cannot be restored or replaced through additional discovery, the court . . . upon finding that the party acted with the intent to deprive another party of the information's use in the litigation may" "presume that the lost information was unfavorable to the party" or "instruct the jury that it may or must presume the information was unfavorable to the party."

61.   The duty to preserve arises when litigation is pending or reasonably foreseeable. *First Fin. Sec., Inc.*, 2016 WL 5870218, at *3. And "intent" in this context means "the evidence shows, or it is reasonable to infer, that a party purposefully destroyed evidence to avoid its litigation obligations." *Phan v. Costco Wholesale Corp.*, No. 19-5713, 2020 WL 5074349, at *2 (N.D. Cal. Aug. 24, 2020). "[T]here is no requirement that the court find prejudice to the non-spoliating party under Rule 37(e)(2)." *Porter v. City of San Francisco*, No. 16-3771, 2018 WL 4215602, at *3 (N.D. Cal. Sept. 5, 2018).

62.   Google could and should have begun preserving all records where is_chrome_incognito was equal "true" and where is_chrome_non_incognito was equal to "false" at the outset of this case. Google instead destroyed those records, with short retention periods for certain data and logs, and Google has identified no way to retrieve those records.

63.   The Court rejects Google's assertion that it was justified in deleting such data during the course of this litigation on the ground that it secured a protective order from the Court concerning the deletion of certain logs *in their entirety*.

64.   The Court never ruled that Google had no obligation to preserve event-level data that was or could have been specifically flagged or could have been flagged with one or more of the undisclosed Incognito-detection bits.

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65.   The record before the Court regarding preservation was based on Google's misleading statements, with Google suggesting that there was no way to identify a subset of data for preservation and claiming it would be burdensome to preserve "all logs." FF ¶¶ 100, 210.

66.   The Court therefore orders as a further sanction that the court presume for all purposes in this case that the data Google deleted was unfavorable to Google. *See* Fed. R. Civ. P. 37(e)(2)(A). Moreover, the jury shall be instructed that "Google during the course of this litigation deleted data that would have been unfavorable to Google's positions in this litigation." Fed. R. Civ. P. 37(e)(2)(B).

IV.   The Court's Inherent Authority

67.   In addition to Federal Rule 37, "discovery misconduct may be punished under the court's inherent powers to manage its affairs." *Guifu Li v. A Perfect Day Franchise, Inc*, 281 F.R.D. 373, 396 (N.D. Cal. 2012); *see also Fink v. Gomez*, 239 F.3d 989, 994 (9th Cir. 2001) (district courts have inherent power to levy sanctions for "bad faith or conduct tantamount to bad faith," including recklessness combined with "frivolousness, harassment, or an improper purpose."). Google does not argue otherwise.

68.   The Court's inherent authority is particularly relevant to Google's discovery misconduct in terms of representations made to the Court and the Special Master. Even to the extent Google's discovery misconduct did not qualify as a violation of any discovery order, the Court chooses to sanction Google for this misconduct under its inherent authority.

69.   As noted above, Google secured a protective order from this Court on preservation in April 2021 without informing the Court that it had by then been logging event-level traffic as "Incognito" by way of at least two Incognito-detection bits in at least ███ logs. FF ¶¶ 74-75, 79-85, 89.

70.   Had Google timely identified these Incognito-detection bits, the Court and Plaintiffs could have considered a narrowed preservation approach focused on data tied to these Incognito-detection bits—a small fraction of the data Google logs.

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71.   Had the Court known of these Incognito-detection bits and Google's ability to extract and combine relevant data, the Court may have ruled differently on Google's motion for a protective order. Instead, Google presented a false "all or nothing" choice to preserve *all* potentially relevant logs in their *entirety* or omit the log from the preservation plan. *See* Dkt. 119.

72.   Google's Opposition Brief does not try to explain why Google did not disclose this relevant information.

73.   Similarly, when the parties subsequently briefed their dispute over production of data lacking any X-Client-Data Header (Dkt. 218), Google had by then also implemented the maybe_chrome_incognito bit, based on the lack of the X-Client-Data Header, into at least ▮ different ▮▮▮▮▮ logs. Reply Ex. 6, Draft Stipulation Regarding Google's Maybe_Chrome_Incognito Field (Dkt. 536-7).

74.   Again, Google did not disclose its Incognito-detection bits to the Court, and Google's Opposition Brief provides no explanation for why Google did not provide the Court with that information.

75.   "'[A] finding that the attorney recklessly or intentionally misled the court' . . . amounts to the requisite level of bad faith." *Indiezone, Inc. v. Rooke*, 720 F. App'x 333, 337 (9th Cir. 2017) (quoting *Franco v. Dow Chem. Co. (In re Girardi)*, 611 F.3d 1027, 1061 (9th Cir. 2010)).

76.   Google did not disclose any of these relevant Incognito-detection bits to the Court in connection with the April 2021 preservation dispute, nor the July 2021 dispute regarding production of data lacking the X-Client Data Header.

77.   Google's failure to do so was reckless at best.

78.   The Court therefore further concludes that all of the foregoing sanctions that have been imposed are independently justified under the Court's inherent authority.

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IT IS SO ORDERED.

DATED: _____   _____

Honorable Magistrate Judge van Keulen
United States Magistrate Judge

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